

Plainwell Paper Company 200 Allegan Street Plainwell, Michigan 49080 616.685.2500 fax 616.685.2588

March 29, 2000



To Whom It May Concern:

Robert D. Bradsher, Mill Manager of the Plainwell Inc. facility at Plainwell, Michigan, is the designated representative. He is responsible for overall operation of the facility and he is authorized to originate and sign all environmental documents, including the NPDES application.

Sincerely,

John W. Boyden II

Sr. Vice President Operations

WAS IEWA LA DISCHARGE PERMIT APPLICATION

SECTION I - General Information

(This information is required by the Part 21 Rules of Michigan Act 451, Public Acts of 1994, as amended, Part 31. A municipality, business, or industry which violates the Part 21 Rules may be enjoined by action commenced by the Attorney General in a court of compensations (in a court of compensations).

See the facing page for instructions on completing pages 1 & 2

DEQUS	E ONLY	Y
Permit ID #	Supplication 🔑	P
19500.1	129300	4

PLEA	SE TYPE OR PRINT					—			ا ا	
1	NPDES PERMIT or C	OC NUMBI	ER MI000	379/	When	e addresses are duplic ess is the same as the	cate you ma	ay indicate :	so (e.g. facility	
ODRESS	Company Name PL Street Address or P.C	AINWELL				Contact Name Khaja Naimuddin Environmental Superintendant Street Address or P.O. Box				
₹			_		Ö					
APPLICANT ADDRESS	City Plainwell	State Mich		ZIP Code 49080	APPLICATION CONTACT	200 Allegan City Plainwell	State Michi	gan	ZIP Code 49080	
2. A	Telephone (with area code) FAX (with area code) (616) 685-2588 e-mail address			A .	Telephone (with area (616) 685-253 e-mail address			area code) 85-2588		
RESS	Facility Name Mineral Technologies Inc. (PCC Plant)					Contact Name Khaja Naimud				
9	Plainwell Paper Kn				FACILITY CONTACT	Environmenta	l Super	intenda	nt	
N N	Street Address or P.O. Box				Ş	Street Address or P.O.				
Ĭ Į	330-Allegan Street 700			I was i	٤	200 Allegan				
¥ ≻	City Plainwell	State Michi	~~~	ZIP Code 49080	顺	City Plainwell	State Michi	gan	ZIP Code 49080	
I. FACILITY MAILING ADDRESS	Telephone (with area code) FAX (with area code) (616) 685-1213			7. Ā	Telephone (with area (616) 685-253	code)	FAX (with	area code) 585-2588		
₹	e-mail address				e-mail address					
DRESS	Facility Name	Facility Name Squarks Ne4 Km			EPORTS	Contact Name Some No. 5 Ku				
FACILITY LOCATION ADDRESS	Street Address				DISCHRGE MONITORING REPORTS	Street Address or P.O. Box				
7 LOC/	City	State		ZIP Code	MON	City	State		ZIP Code	
FACILII	Telephone (with area	code)	FAX (with	area code)	SCHRG	Telephone (with area	code)	FAX (with	FAX (with area code)	
v i	e-mail address				ă.	e-mail address	37 3 ,500	M. Black	· •.	
	Contact Name	7	Δ.\	Kn .		Contact Name	. 223		Same As No. 5	
DNI					IFING	·				
DS BILL	Street Address or P.O	. Box			TEA BI	Street Address or P.O	Box	iki je j	·	
BIOSOLIDS BILLING	City	State		ZIP Code	STORM WATER BILLING	City	State		ZIP Code	
•	Telephone (with area	code)	FAX (with	area code)	9. STC	Telephone (with area	code)	FAX (with	area code)	
	e-mail address					e-mail address				

Kn: Khofu Naimudin

WASTEW/ ER DISCHARGE PERMI \PPLICATION SECTION I - General Information

PLEASE TYPE OR PRINT								•	
FACILITY NAME PLAINWELL INC.		NPDE	S PERMIT	or COC NU	MBER	MI00037	94	4	
10. PERMIT ACTION REQUESTED (Check one box only) (see	instructions p	age iv)						7	
NEW, proposed discharge ("New Use" OR an "Existing"	discharge cur	rrently	unpermitted	1).				90	
REISSUANCE of current permit.								_	
Check here if the permit reissuance proposes an description of the proposed "increased use".	increased loa	ading (of pollutants	s to the rec	eiving w	ater ("Increas	ed Use"). Attac	th a	
MODIFICATION of current permit.									
Check here if the request includes an increased los	iding of polluta	ants to	the receiving	ng water ("Ir	creased	Use"). Attact	a description of	the	
proposed modification:									
GENERAL PERMIT COVERAGE: Check here if you wish to be considered for coverage under a general permit. (see appendix Table 10) Check here if you are applying to land apply biosolids in Michigan. Out of state and Groundwater discharger's see instructions on page by.									
- U Check here if you are applying to land apply biosolids	in Michigan.	Out o	state and	Groundwate	r dischar	ger's see instr	uctions on page	iv.	
11; RULE 1098 DEMONSTRATION (see instructions page iv)							_		
in accordance with Rule 323.1098 of the Part 4 Rules, the p in of pollutants to the surface waters of the state. Has the "I									
increased use) box in question 10 above, been checked? (s				10.03041.00	(*****	, 100300 030) \	N MOUNICALION (valu 1	
Yes, Submit a Rule 323.1098 demonstration (refer to Ru	de 323.1098,	page 4	in the app	endix for ins	tructions). Questions s	should be directe	d to the	
appropriate district office (see page 2 and 3 in the appe	ındix).								
No, Continue with Item 12.				··					
12 ADDITIONAL FACILITY LOCATION INFORMATION (see i	nstructions on	page	iv)						
A: County / Township County Allegar	_			Township	Com	Dlade			
	1	1/		<u> </u>		un Plain			
B: State Planar Coordinates SE 14, 14	NE	14	Section	30	Town 0	1N	Range 11W		
C: Latitude / Longitude Latitude				Longitude					
(to the nearest 15 seconds) 042-26-36	<u> </u>			L	083	-38-33			
13. CERTIFIED OPERATOR (see instructions on page iv)		0		•					
Does the facility have a certified operator? Yes	No X	Certin	cation Num	iber:	2492				
Operator's Name: Khaja Naimuddin		Certif	cation Clas	sification(s):	A-1	h, B-2a,	C-1b, C-3	8	
14. OTHER ENVIRONMENTAL PERMITS									
Provide the information requested below for any other feder			-		•	•			
this application form; including, but not limited to, permits		•		• • •					
Management, Wetlands Protection, Soil Erosion and Sedil 8 1/2" x 11" paper as an attachment to this application.		HILOI, A	NIC OUTER IN	irucs pem	MIS. MIC	luce any accor		1 On	
Issuing Agency	<u>.</u>	P	ermit or Co	OC Number		P	ermit Type		
					T		ermit Type		
Issuing Agency EPA Identification: MI-DEO Haste Management	gement		ermit or C			RCRA	ermit Type		
	gement	MI-I							
EPA Identification: MI-DEO Haste Manag	gement	MI-I	0053666 0024	228		RCRA AQD Sour			
EPA Identification: MI-DEO Haste Mana	gement	MI-I	053666	228		RCRA			
EPA Identification: MI-DEO Haste Manag	·	MI-I	0053666 0024 10. 27-	228		RCRA AQD Sour			
EPA Identification: MI-DEO Haste Managemin-DEQ-AQD MI-DEQ-AQD	·	MI-I	0053666 0024 10. 27-	228 		RCRA AQD Sour			
EPA Identification: MI-DEO Haste Manag	·	MI-I	0053666 00024 00. 27- 30iler	228 73 #1,#2,#3		RCRA AQD Sour air use			
EPA Identification: MI-DEO Haste Managemin-DEQ-AQD MI-DEQ-AQD	·	MI-I	0053666 00024 NO. 27-	228 73 #1,#2,#3		RCRA AQD Sour air use			
EPA Identification: MI-DEO Haste Managemin-DEQ-AQD MI-DEQ-AQD	·	MI-I	0053666 00024 00. 27- 30iler	73 #1,#2,#3 89		RCRA AQD Sour air use		only	

FACILITY NAME

PLAINWELL PAPER COMPANY

0003794

15. WATER FLOW DIAGRAM AND NARRATIVE DESCRIPTION Provide a flow diagram (using 8 1/2" x 11" paper if possible) showing the wastewater flow through the facility including all treatment units. processes and bypass piping, and a narrative description of the water flow through the facility from intake to discharge. Show all operations

contributing wastewater and the locations of flow meters, chemical feeds and discharge points. The water balance shall show daily average flow rates at intake and discharge points and approximate daily flow rates between treatment units including influent and treatment rates. Use actual measurements whenever available, otherwise use your best estimate. Show all significant losses of water to products, atmosphere and discharge,

Municipal Facilities - include a narrative that briefly describes the history of the wastewater treatment facility. Include information describing when it was first constructed, what improvements have been made, future plans for upgrade, and other pertinent information.

Industrial and Commercial Facilities - The line diagram shall include all operations contributing wastewater including process and production areas, sanitary flows, cooling water and storm water runoff. Include a narrative which provides a brief description of the manufacturing processes.

ATTACH THIS INFORMATION TO THIS APPLICATION PLEASE DO NOT BIND THIS INFORMATION

16. MAP OF FACILITY AND DISCHARGE LOCATION

Provide a detailed map on 8 1/2" x 11" paper showing the location of the existing or proposed facility, wastewater and biosolid treatment system(s), and wastewater discharge points into receiving waters (including bypasses). Include the exact location of the wastewater discharge point(s) and all areas through which the discharge flows (e.g. wetlands, open drains, storm sewers), if applicable, between the discharge point and the receiving water. If the discharge is to a storm sewer, label the storm sewer and show its flow path to the receiving water. Also include the location of any water supply wells and groundwater monitoring wells. This map shall be a United States Geological Survey Quadrangle (7.5 minute series) or other map of comparable detail, scale and quality (which shows surface waterbodies, roads, and other pertinent landmarks). The minimum area this map shall encompass is approximately one mile beyond properly boundaries.

ATTACH THIS INFORMATION TO THIS APPLICATION

17. LIST ADJACENT PROPERTY OWNERS

List the names and addresses of all property owners adjacent to the facility, treatment systems, and discharge locations. List this information in the space provided below or include the information as an attachment on 8 1/2" x 11" paper. If additional space is necessary, copy this blank page and attach this information to this application.

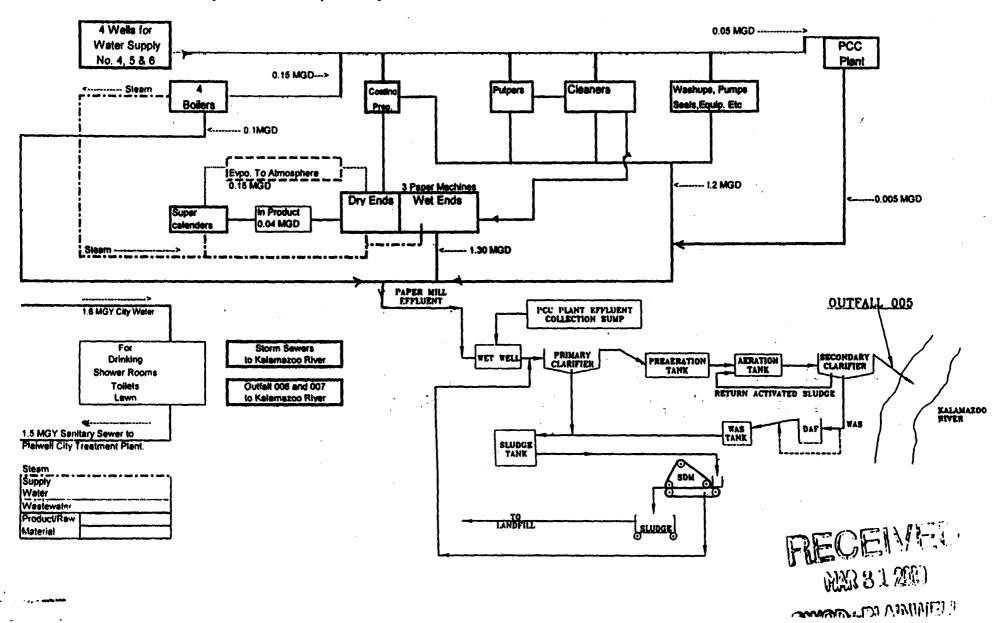
Name	Address	City	State	ZIP Code
Plainwell City W.T.P.	129 Fairlane	Plainwell	MI	49080
Leelon J. Boney	150 Prospect Avenue	Plainwell	мі	49080
Roy Lehman	610 Allegan Street	Plainwell	мт	49080
Mark Mattimore	428 Allegan Street	Plainwell	MI	49080
Parker Sharrard	436 milegan Street	Plainwell	МІ	49080
Brett Crow	140 Prospect Avenue	Plainwell	MI	49080
Clifford McKinstry	120 Prospect Avenue	Plainwell	MI	49080
	Nation 1			
	-COMIG-	MANAGE		

Plainwell Inc.

NPDES Permit No. MI0003794

- St920
 Mill manufactures about 350 tons per day technical and printing paper on three paper machines using all purchased raw materials. 2.8 MGD (Avg.) is pumped out from the wells (No.4, 5 & 6) for the mill process and 0.0045 MGD supply to Mineral Technologies-Precipitated calcium carbonate plant (PCC). The wastewater from the paper mill and PCC plant is discharged to our wastewater treatment plant to meet NPDES limits of outfall 005.

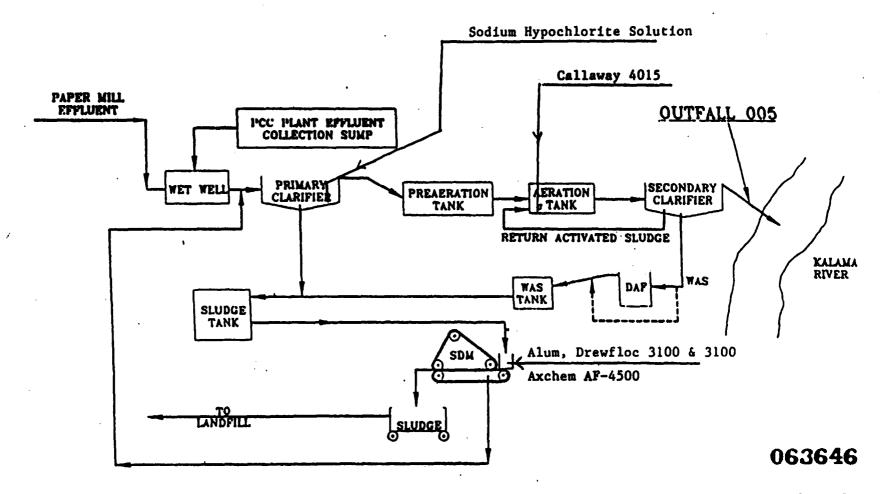
 The major evaporative losses occur from paper drying sections, supercalenders and steam discharges.
 - Outfall 006 and 007 are self monitoring discharge points of noncontaminated water for testing fire pumps No. 1 and 2.
 once a week for 30 min. (006: 3,600 gal./week and 007: 60,000 gal./week)
 - Drinking water, water for lawn, showers and toilets are supplied by the City of Plainwell. Completely isolated sanitary wastewaters are discharged to the treatment plant of city of Plainwell.





WASTEWATER TREATMENT PLANT NPDES PERMIT NO. MI 0003794

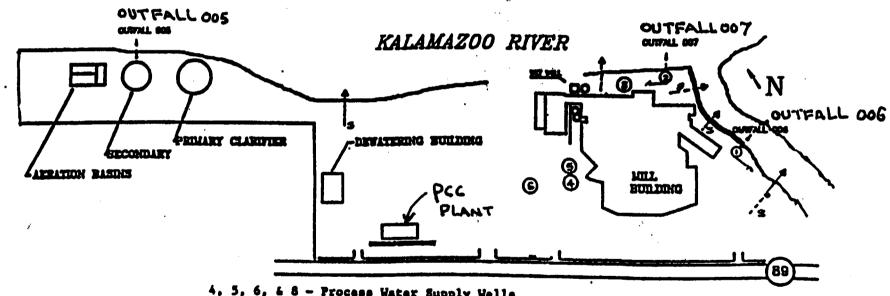
PLAINWELL Inc.



003137

Plainwell Inc.

NPDES Permit No. MI0003794



5. 6. & 8 - Process Water Supply Wells

- Fire Protection Water Walls

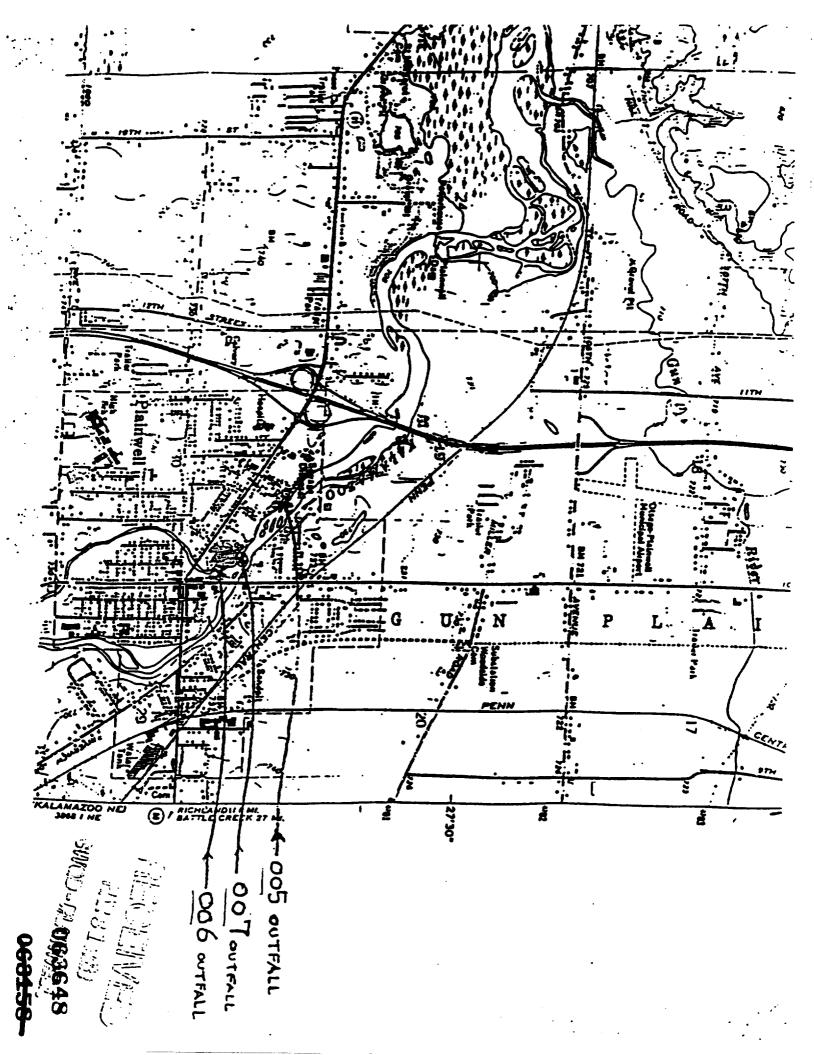
9 - Storm Severs

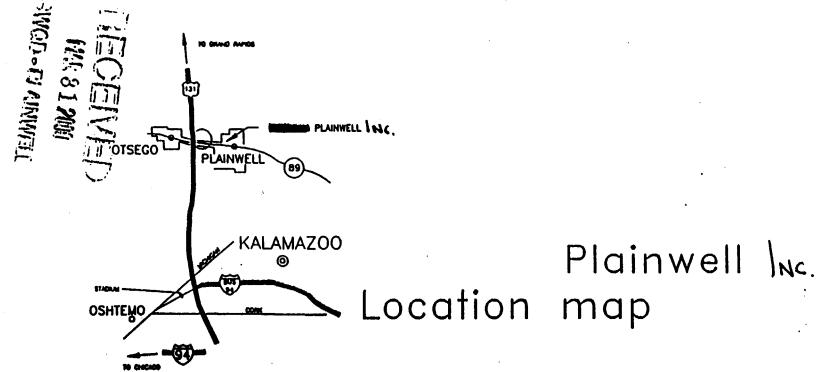
PLAINWELL INC.

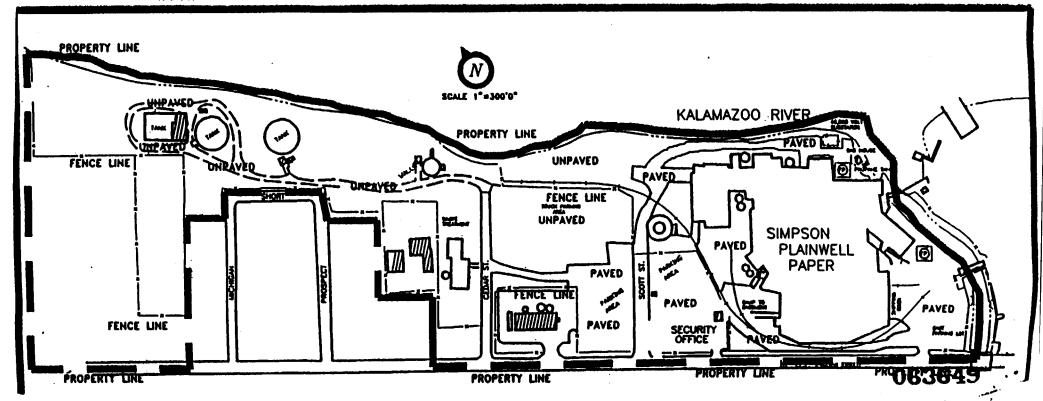
Outfall 005: Discharge from the Wastewater Treatment Plant

063647

Outfall 006: Non-contaminated discharge for testing fire protection pump No. 1 outfall oot







SECTION I - General Information

FACILITY NAME PLAINWELL INC.	NPDES F	ERMIT or COC NUMBER MI0003794	9
18. ALTERNATE POWER SOURCE If you are applying for a New or Existing	ng Unpermitted discharge, continue to S	ection II or Section III.	
		and that have been made to the alternate account	
Applicants with an approved <u>Alternate Po</u> the facility in the past five years. Submit station or treatment unit the alternate pow	the new information with the application a	pes that have been made to the alternate power source and provide specific information regarding the appropria	ate pump
the facility in the past five years. Submit station or treatment unit the alternate pow	the new information with the application a wer source serves.	nd provide specific information regarding the appropri	ate pump
the facility in the past five years. Submit station or treatment unit the alternate pow	the new information with the application a wer source serves.	nes that have been made to the alternate power source and provide specific information regarding the appropriate share been developed in case of a power outage to the local state of th	ate pump
the facility in the past five years. Submit station or treatment unit the alternate pow A. Indicate if the facility has a back-up so	the new information with the application a ver source serves. ource of power and if emergency procedure. No.	nd provide specific information regarding the appropriate share been developed in case of a power outage to	ate pump

This completes Section I. Facilities requesting authorization to <u>only</u> discharge sanitary wastewaters continue with Section II. Other facilities requesting authorization to discharge wastewater continue with Section III. Section I shall be accompanied by either Section II or Section III of this application. If you need assistance in determining the appropriate Sections to complete, contact the district office (see Pages 2 and 3 in the appendix for district office addresses and a map of district boundaries).

All sanitary waste waters discharge to Plainwell City Waste Water Treatment Plant.

Permit No. IU-PL00S1M02

Yes, Submit the information as an attachment to this application.



□ No.

SEC ON III - Industrial and Commercial "lastewater

Section III is to be completed by all facilities classified as Industrial or Commercial facilities. Industrial and Commercial facilities include facilities that discharge or propose to discharge a wastewater generated by a production process or service provided or through a remediation. If project. Municipal and public facilities are not required to complete Section III (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other than complete section III) (unless requesting authorization for discharges other

٩٤	EASE TYPE OR PRINT										
FA	CILITY NAME PL	ainwe	ll Inc.			NPDES PERMIT or COC NUMBER MI0003794					
1.	BUSINESS INFORMA A. Provide up to four codes, in order of major products or	(4) Stan	ic importance, w	hich best d	- •	1. 2	2	6	3. 2		4.
	B. Indicate if this facility is a primary industry (refer to Table 2 in the appendix to determine if this facility is a primary industry). **AST Yes, This facility is a primary industry. Indicate the primary industry as identified in Table 2 in the appendix Integrated Fine Pa										
	□ No. This facility is not a primary industry, continue with flem C.										
	No, This facility is not a primary industry, continue with flem C. C. Do you operate a concentrated animal feeding operation or an aquatic animal production facility? Yes, Contact the appropriate district office (see Pages 2 and 3 in the appendix). No, Continue below.										
2.	WATER SUPPLY AND A. List all water sour Provide the name gallons per day), I following it and pro-	ces and of the so MGY (m	I provide average ource where appoiling parties	ropriate (i.e ' year), GP	o., Grand Ri 10 (gallons	iver, Lake Mich per day). If y	igan, City ou are rep	water supply m of Milipond). Th orting in anothe	eler readin he units are or unit, sele	gs, pump as follow ct the box	capacities, etc vs: MGD (million x with the blant
				Name of	Source		Averag	e Volume or Fl	ow Rate	Indica	te <u>Units</u>
	Municipal S	Supply	City	of Pla	inwell		1.6			□MGD □GPD	
	Surface Water	Intake		_			-			OMGD OGPD	
	Privat	e Well	Wells	owned	by Plai	nwell Inc	well _{Inc.} 2.8 ⁺			MGD DMGY	□GPD □
	Other (sp	pecify)								□MGD □MGY	□GPO
	Identify water disci another purpose, in process water, indi they are different, p	ndicate t icate the provide a	he type and amo amount of proc an explanation	runt of the ess water.	The amou	or example, if v	vater is inil	ially used for no should approxin	oncontact co naie the an	coling wat nount of v	ler and then for vater usage. If
	l	Aver	age Flow Rate		te Units]		Average Flo	w Rate		te Units
	Process Wastewater		2.72	□MGY		Sanitary V	Vaslewal e r	1.5		MGY	
	Contact Cooling		-	□MG0 □MGY	□GP0 □	Regulated St	orm Water	Unkown		CMGD CMGY	□GPD
	Noncontact Cooling	,	* 3.3	□MGD MMGY	□GP0 □		нрт w			CMGD CMGY	
	GWCU	Kn	-	□MGD MMGT	OGPO Kon	Othe	r (Specily)			CMGD CMGY	1

*Noncontaminated fire pupms testing water from Outfall 006 and 007

GWCU - stands for Groundwater Clean-Up

HPTW - stands for Hydrostatic Pressure Test Water

OUTFALL



SEC ON III - Industrial and Commercial

ustewater

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank of the application if necessary.

PLEASE TYPE OR PRINT

	/ NAME P1:	ainwell	inc.			NPDES PERMI	11000379			OUTFAL	L NUMBER 005
ουτ	FALL INFORMATI	ON (see pa	age 24 for instr	uction on com	npletion of th	is page)					
A.	Watershed	Ka	lamazoo R	River							
В.	Receiving Water	Ka	lamazoo R	River							
C.	County	Al	legan	·· <u>·</u> ·······		Township	Gun	Plain			
D.	SE	14, 14	NE	14	Section	30	Town	01N		Range 11	W
E.	Latitude 042	26	36			Longitude	085	38	33	<u> </u>	
F. ¹	Type of Wastewate	r Discharge	ed (Check all ti	hat apply):							
}	Contact Cooling	Kn		□ Sa	nitary Waste	water		l D s	torm Wa	ater (regulated)
1	Noncontact Cool	ling		€ Pro	ocess Waste	water		□ s	torm Wa	ater (not regula	ated)
, 6 t											
	s this a Seasonal C Yes, List the disc	•	 	in the space (provided bel	,		XN		nue with item (Az1
	Yes, List the disc	•	Through	in the space (provided bel	ow. From		X N	o, Contir		Rz(
	Yes, List the disco	•	 	in the space (provided bel	,		XN		gh	R _Z (
Fro	Yes, List the disco	harge perio	Through	in the space (provided bel	From	rs/day	XN	Throug	gh	
Fro	Yes, List the disconnorm Discharge Schedule	harge perio	Through Through verage):		31 Poly 11	From			Throug	gh gh	days/yea
Fro	Yes, List the discome or Discharge Schedule Expected or Propose Total Yearty	e (Yearly Av	Through Through verage): ge Flow Rates: Daily Minime	um .	O Daily A	From	Daily	Maximum	Throug	gh Maximum De	days/yea
Fro	Yes, List the discome or Discharge Schedule Expected or Propose Total Yearty	harge perio	Through Through verage):		31 Poly 11	From		Maximum	Throug	Maximum Dec	days/yea

Michigan Department of Environmental Quality- Surface Water Quality Division

WASTEWATTR DISCHARGE PERMIT PPLICATION

SECTION III - Industrial and Commercial Wastewater

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this bla

of the application if necessary.							
FACILITY NAME Plainwell Inc.		NPDES PERMIT or COC NUMBER OUTFALL NUMBER MI0003794 005					
 WATER TREATMENT ADDITIVES A. Is there a discharge of any water treatment. No, Continue with Item 5. Yes, Provide the following information attachment to this application. Enter e.g., biocide, corrosion inhibitor, etc. concentrations of the proposed additional estimate shall be made using stoichic 	tion for each additive. Fir the product name of the a provide the average an ives after all treatment has	Provide the Materi additive and name of maximum propo occurred. If the ad	al Safety Data St of the manufacture osed discharge co ctual proposed dis-	neets (MSDS) for er. Describe the forcentrations of the charge concentrations	or each action of the additive tions are n	dditive as an the additive e. Enter the not known, an	
week or year.	****	Discharge Co	oncentrations				
Product Name/Name of Manufacturer	Additive Function	Average	Maximum	Discha	rge Frequ	ency 🗀 💮	
Liquid Sodium Hypochlorite	Odor control	□μg/l < 0.02 1 2 mg/l	□μg/I (0.02121mg/I	hours/day 24	7 365	Mdays/w	
		□μg/1 □mg/l	Ωμ g/ 1 Ω mg/ 1	hours/day		□days/w	
Amended Fee		Vem⊡ Nem⊡	□μg/1 □mg/1	hours/day		□days/w	
Ainended Fee Following Page	į į	∏ug/l	□μg/i	hours/day		□days/w	
	·	□µg/I ⊡mg/I	⊡μἰg/1 □mg/1	hours/day		□days/w	
		Dwg/l	⊡mg/l	hours/day		☐days/w ☐days/yr	
		Vgm□	Ngu☐ Ngm☐	hours/day		□days/w □days/yı	
		□µg/t □mg/t	□μg/l □mg/l	hours/day		□days/w □days/yı	
B. Table 11 contains a list of the additives of the additive this facility is proposing to d and Environmental Assessment Section any additional information. If the DEO facility, the applicant must provide a 48-1 sp.) and the results of a toxicity test for a minimum requirement of Rule 323.1057 discharge authorization unless the approximation.	ischarge is not included in at 517-335-4184 to inquire does not have sufficient to hour EC50 for a North American F7(2)(a) of the Part 4 Water	Table 11 in the app about the status sicological informa rican planktonic co reshwater aquatic r Quality Standard	endix, call the Sur of the specific wa tion for any additi ustacean (Daphnia species (other tha	face Water Qualit uter treatment add ve being propose u sp., Ceriodaphni un a planktonic cru	y Division litive prior d for disci a sp. or S istacean)	. Great Lake to providing harge at this imocephalus that meets a	
Aquatic toxicity data is attached.							
C. If the discharge is treated to remove any the treatment process:	of the above additives prio	r to discharge, indi	cate which additive	the treatment is f	or and bri	efly describe	
		į	PEGE				
			经现 3	2 000			
		1	וק-כפשו	NAMES :			

Michigan De, ment of Environmental Quality- Surface 'er Quality Division WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III - Industrial and Commercial Wastewater

B. Outfall Information

Complete a separate Section III.B Out of the application if necessary. PLEASE TYPE OR PRINT	fall Information (pages 24-3	0) for each outfa	all at the facilit	y. Make copies	of this blank section
FACILITY NAME Plainwell Inc.		NPDES PERMIT	ER (94	OUTFALL NUMBER 005	
4. WATER TREATMENT ADDITIVES A. Is there a discharge of any water treating the second of the second	mation for each additive. P	rovide the Materia	and/or wastewate	er used or generate	or each additive as a
e.g., biocide, corrosion inhibitor, concentrations of the proposed a estimate shall be made using sto week or year. Product Name/Name of Manufacturer	etc. Provide the average and dditives after all treatment has a	d maximum propo occurred. If the ac	osed discharge on the citical proposed discharge on centrations	concentrations of the concentration of the concentr	the additive. Enter the
Liquid Sodium Hypochlorite	Odor control	ΩμΩ	□μg/1 (0.0212 mg/l	hours/day 24	
+vé Polymer Ashland 3100	Sludge dewatering	□μg/I 0.04 % mg/I	_ 1\2010 1\2010	hours/day 24	7 Edays/ 365 Edays/
♦ve Polymer Axchem 4500	Şlüdge dewatering	μοΛ 0.0470mg/l	- Ωμονί 0.05 γέ πονί	hours/day 24	7 風days/y 365 電days/y
-ve Polymer Ashland 2230	Sludge dewatering	0.4 ½ βμg/l ⊡mg/l	0.5¶µg/l □mg/l	hours/day 24	7 MdaysA 365 daysAy
+ Polymer Callaway 4015	Settling of secondry sludge	8.0 ⊠ աջ/ 1.8	12:0 ⊠ µg⁄l □mg⁄l	hours/day 24	7 Mdays/v 365 Mdays/y
Defoamer BASF-SP32	Killing of sufaction	3.5 12 mg/l	- Gμg/ 4.4% mg/	24hours/day	7 Pdays/v 365 Pdays/y
		□μg/l □mg/l	Dµg/I	hours/day	☐days/v
		⊔µg/I □mg/I	□µg/I □mg/I	hours/day	□days/v □days/y
 B. Table 11 contains a list of the additive the additive this facility is proposing the and Environmental Assessment Section and Environmental Assessment Section and additional information. If the DE facility, the applicant must provide a 4 sp.) and the results of a toxicity test if minimum requirement of Rule 323.1 discharge authorization unless the applicant toxicity data is attached. C. If the discharge is treated to remove a the treatment process: 	o discharge is not included in T tion at 517-335-4184 to inquire Q does not have sufficient tox 18-hour EC50 for a North American For	able 11in the apperation about the status icological information of the status and planktonic crueshwater aquatics. Ouality Standards d.	endix, call the Su of the specific wa ion for any addit stacean (Daphni species (Din ha i. The water tra-	rface Water Quality ater treatment add tive being proposed a sp., Ceriodaphnia and a planktonic cruman apatitive will appear to the CT 1 7 2000 at the LAMMAN.	by Division, Great Lake liftive prior to providing d for discharge at this a sp. or Simocephalus
		ប			

MODEL CHARACTER

SEC7. N III - Industrial and Commercial V. astewater

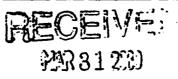
SECT. N III - Industrial and Commercial V. astewater

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank serious control of the configuration if necessary. of the application if necessary.

PLEASE TYPE OR PRINT

FACILITY NAME Palinwell Inc.	NPDES PERMIT of COC NUMBER MI0003794	OUTFALL NUMBER 005
5. PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE This information is used to determine the applicable federal regulations of the type of facility. Page 11 of the appendix contains an abbreviated list application. Assistance can be received by calling the appropriate distribute name of each process and the Standard Industrial Classification (SI categorical standards, the applicant shall report all pollutants which have Make additional copies of this page if necessary.	t of various industries and the types of information ict office (see pages 2 and 3 of the appendix). All C) code for the process. If the wastestream is not	each shall report in this industries shall provide regulated under federal
PROCESS INFORMATION A. Name of the process contributing to the discharge: B. SIC code: 2621 C. Describe the process and provide measures of production (see the in The manufactures coated printing and technusing all purchased raw materials. — 35	nical papers on three paper made	to be reported):
PROCESS INFORMATION A. Name of the process contributing to the discharge: Manufac B. SIC code: 2819 C. Describe the process and provide measures of production (see the incompany contribution) and water are used to make PCC.		
PROCESS INFORMATION A. Name of the process contributing to the discharge: B. SIC code: C. Describe the process and provide measures of production (see the in		n to be reported):
PROCESS INFORMATION A. Name of the process contributing to the discharge: B. SIC code: C. Describe the process and provide measures of production (see the in	nstructions to determine the appropriate information	n to be reported):
PROCESS INFORMATION A. Name of the process contributing to the discharge: B. SIC code: C. Describe the process and provide measures of production (see the in	nstructions to determine the appropriate information	n to be reported):



SMOD- STANMET

SEC. ON III - Industrial and Commercia. .. /astewater

B. Outfall Information

Complete a separate Section III.B.- Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank set of the application if necessary.

PLEASE TYPE OR PRINT

FACILITY NAME PLAINWELL PAPER COMPAN	Y	NPDES PERMIT	TFALL NUMBER		
6. WASTEWATER CHARACTERISTICS - CONVENTA					
Check this box if additional information is included					g page.
	Maximum	Maximum			
1	Daily	Monthly		Number of	
Parameter	Concentration	Concentration	. Units	Analyses	
Biochemical Oxygen Demand - five day (BOD ₃)	553	374	Ngm	225	☐ Grab ☑ 24 Hr Com
COD (Chemical oxygen demand)			mg/l		Grab 24 Hr Com
TOC (Total organic carbon)	A ic		mg/l		☐ Grab ☐ 24 Hr Com
Too Tools organic careery	655 11	100,000	ng/i		☐ Grab
Ammonia Nitrogen (as N)	155 TV	(- ·		ļ	24 Hr Com
Total Suspended Solids	1,829	396	rng/l	282	Grab 24 Hr Comp
Total Dissolved Solids			mg/l		Grab 24 Hr Comp
	0.40	0.19	mg/l	56	Grab 24 Hr Comp
Total Phosphorus (as P)	maximum-7day		counts/100ml	- 50	
Fecal Coliform Bacteria (report geometric means)		 	631	ļ	Grab
Total Residual Chlorine	<0.02	<0.02	mg/i jugyi	56	Grab
Piershad Ou was	minimum daily	Do Not Use	mg/f	61	Grab
Dissolved Oxygen	minimum	maximum		1 01	- G.ab
(report maximum and minimum of individual samples)	6.9	8.2	Standard Units	264	Grab
Temperature, Summer	97	68	€ ℃	121	Grab
Temperature, Winter	95	80	⊕ •c	136	Grab
			mg/l		
Qil & Grease	<u> </u>	 -			Grab Grab
					24 Hr Comp
			-		Grab
					24 Hr Comp
					Grab
		PEC			24 Hr Comp
			31 W L-A		Grab 24 Hr Comp
		711,5 6	129		Grab
		1 221 6	والأربية لله		24 Hr Comp
		311107-7	THINKE		☐ Grab
		19971207 1			24 Hr Comp
•					Grab
		 			☐ 24 Hr Comp ☐ Grab
					24 Hr Comp
					Grab
					24 Hr Comp

SECTION III - Industrial and Commercial Wastewater

B. Outfall Information

Complete a separate Section III B. Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank of the application if necessary. of the application if necessary.

PLEASE TYPE OR PRINT		r:::::::::::::::::::::::::::::::::::::				
FACILITY NAME PLAINWELL PAPER COMPAN		NPDES PERMIT OF COC NUMBER OUTFALL NUMBER 0003794 005				
6. WASTEWATER CHARACTERISTICS - CONVENTE	CHAL POLLUTANT	S - Instructions for a	completing this p	age are on the facing	page.	
Check this box if additional information is included						
	Maximum	Maximum				
	Delly	Monthly		Number of		
Parameter · · · · · · · · · · · · · · · · · · ·	Concentration	Concentration	. · · Unite	Analyses	Sample Type	
		18	nga	208	[] Giab	
Biochemical Oxygen Demand - five day (BODs) You	.24	10			24 Hr Comp	
			Nom		☐ Grab	
COD (Chemical oxygen demand)	<u> </u>		ļ		D 24 Hr Comp	
			Mg/l		O Grab	
TOC (Total organic carbon)			 		☐ 24 Hr Comp	
			mg/f	1	D 24 Hr Comp	
Ammonia Nitrogen (as N)	 	 			O Grab	
Total Suspended Solids	78	17	mg/I	260	24 Hr Comp	
Total Suspended Solids KM	- · · · · · · · · · · · · · · · · · ·				O Grab	
Total Dissolved Solids]	mg/l		1 24 Hr Comp	
1008 Dissolved Solids					□ Grab	
Total Phosphorus (as P)	0.40	0.19	mg/l	56	24 Hr Comp	
Total Priospriores (43.7)	maximum-7day		counts/100ml			
Fecal Coliform Bacteria (report geometric means)	1 - 1 1 - 1				Grab	
			(mg/l)	1		
Total Residual Chlorine	<0.02	<0.02		56	Grab	
	minimum daily	Do Not Use	mg/l			
Dissolved Oxygen	3.0	, maximum		61	Grab	
pH	minimum	8.2	Standard Units	264	Grab	
(report maximum and minimum of individual samples)	6.9			404	GIAD	
	97	68	€ ℃	121	Grab	
Temperature, Summer			<i>(</i>)		1	
Temperature, Winter	95	80	⊕ ~	136	Grab	
Tamperature, Warner			mgf			
Oil & Grease					Grab !	
				1	Crab :	
					D 24 Hr Comp	
	1			1	C Crab	
					1 24 Hr Comp	
·			6: 111:.	1	D Grab	
			5 1 1 1 E		24 Hr Comp	
			all V Later		24 Hr Comp	
		343	7777			
		4A			L A Como	
		בומוסים דיו	MINIST		U Grab L TR Comp	
	Ī	- SMCコー山		i 1 1	D 24 M. Cama	
	· · · · · ·			ULI 1 / ZUUU	Grab	
1				1 1	3 24 Hr Corns	
			2MAC	D-PLAINW	EE	
_]		ļ		Estin Common	
	•		i	- 1		
<u> •</u>	<u>:</u>	<u> </u>	;	•	12 6	

Michigan Department of Environmental Quality-Surface Water Quality Division

WASTEW TER DISCHARGE PERM. APPLICATION

SECTION III - Industrial and Commercial Wastewater

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank setion of the application if necessary.

PL	EASE	TYPE	OR	PRINT	
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PLI	./.>	E TTPE OR PHIN	<u></u>		,	7
FAC		TY NAME	Plainwell Inc.	,	NPDES PERMIT OF COC NUMBER MIQ003794	OUTFALL NUMBER 005
7.	Co		Y TOXIC POLLUTANT IN only if the facility is a pri		sted in item 1 of this section. If this is not a pr	imary industry, continue
	on a (e outfall and subm	it the results of the analysi	is for oth er substantiall y i	uested from the appropriate district supervisor to dentical outfall(s). If the request is granted by the outfalls which were not sampled are substantially	district supervisor, attach
	A .	check "YES" and		the discharge from this	stewater. If the discharge from this outfall cont outfall does not contain any process wastewater, ater?	
		X Yes, Continue	with B.	☐ No, Continue with	Item 8.	
*	В.	-			nts. Table 2 in the appendix contains a list of GC the facility industrial category.	VMS fractions required by
		X Volatile		X Base/Neutral	X Acid	M Pesticide
	3 i	n the appendix. Pocess wastewater :	rovide copies of the analy	tical results or record the lata for the parameters s	ed above. The required parameters in each fract information in Item 9. Additionally, all primary in pecified in Table 4 in the appendix. Applicants arge.	dustries which discharge
8.		If an applicant, re appendix) is disch	narged from any outlall, the	scharge, knows or has r	eason to believe that any pollutant listed in Table be provided for those pollutants.	es 3, 4, 5, 7 and 8 (in the
		X Not Applicable	e/Believed Absent	Present, Data is a	ttached or recorded in Item 9.	
	В.		opendix) are discharged fr	•••	ype of discharge, knows or has reason to believ ant <u>shall</u> describe reasons for the pollutant being	• •
		Not Applicable	e/Believed Absent	Present, Data is a	ttached or recorded in Item 9.	
	C.	Trichlorophenoxyl trichlorophenyl) p analytical calibrat believe that 2,3,7,	propanoic acid (Silve) phosphorothioate (Ronnel ion procedures. All surfi	(i); 2-(2,4,5-Trichloroph (i); 2,4,5-Trichloropheno (i) 2,4,5-Trichloropheno (i) 2,4,5-Trichloropheno (ii) 2,4,5-Trichloropheno (iii) 2,4	manufacture 2,4,5-Trichlorophenoxy acetic a enoxy) ethyl 2,2-Dichloroproprionate (Erbon); I (TCP); or Hexachlorophene (HCP) <u>must</u> rep dicants (primary and secondary industries) who a present in their discharge <u>must</u> report qualitativ D.	0,0-Dimethyl 0-(2,4,5- ort data using standard know or have reason to
		X Not Applicable	e/Believed Absent	Present, Data is a	ttached or recorded in Item 9.	
	D.	* *		_	(including WET tests) were made in the last thre arge(s), provide this information as an attachment	• • •
		Not Applicable	•	Applicable, Data is	s attached.	
		laboratory or firm	as an attachment to this a	pplication.	150	meand address of each
		☐ Not Applicable	•	Applicable, Inform	ation is provided.* lances not listed in Tables 3 through 9 in the appearance or recorded in Item 9.	1 300
	F.	Does the facility d	ischarge any other toxic o	r injurious chemical subs	tances not listed in Tables 3 through 9 in the appe	nbix(12)
		No. Continue	with Section III.C.	Yes, Data is attact	hed or recorded in Item 9.	अभिप्राक्तः .
					1 . I I . Was I all and the	

SEC. JN III - Industrial and Commercial

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank section Please see the attached sheets: analysis conducted by Kar Lab of the application if necessary.

of the application in need	, , , , , , , , , , , , , , , , , , , ,	riease se	e the	attached sheets.dheayers	
PLEASE TYPE OR PRINT				NPDES PERMIT OF COC NUMBER	OUTFALL NUMBER
FACILITY NAME	Plaiwell	Inc.		MI0003794	005

EFFLUENT CHARACTERISTICS - TOXIC POLLUTANTS

This worksheet is to be used by applicants to record information on any Michigan Critical Material, EPA Priority Pollulant, or hazardous substance for which this application requires that data be provided. This includes any substance from Table 3 which lists Organic Toxic Pollutants, Table 4, Other Toxic Pollutants, Table 5, Conventional and Nonconventional Pollutants, Table 6, Toxic Pollutants and Hazardous Substances, Table 7 the Michigan Critical Materials Register, or Table 8 the EPA Priority Pollutant Listing (in the appendix). If the applicant believes a pollutant may be present in the effluent that is not included in these lists, data shall be provided for that pollutant with this application. This information may also beincluded as an attachment to this application on 8 1/2" x 11" paper. Page 12 of the appendix is a list of minimum testing requirements for various dischargers. As a minimum, applicants for those types of discharge must provide analytical data based on that list.

Applicants shall use EPA approved analytical methods when conducting sampling (40 CFR 136). For each parameter provide the name of the parameter as listed in the Tables, the maximum daily and monthly discharge concentrations, units, the number of analyses performed, and the sample type. If analytical results for a composite sample are being provided and the sample is not a 24-hour composite, include a description of the sample collection technique used as an attachment to this application on 8 1/2" x 11" paper. When calculating an average where some values are detectable and others are nondetectable, either provide the actual data, or regard each nondetectable value as the detection level when calculating concentrations and indicate that the result is "less than" the value reported. (See definitions of 'daily concentration' and 'monthly concentration" in the general provisions at the front of this form.) Please include an explanation if "Pollution Prevention" is expected to provide reductions of pollutants. (See page ii and iii for sampling definitions, including, "daily concentration", and "monthly concentration".) See Table 12 in the appendix for acceptable "Levels of Quantification".

In addition to the maximum daily and maximum monthly concentrations required above the applicant must provide individual sample data to determine if Water Quality Based Effluent Limits (WQBELs) are necessary. If more than 10 individual samples results are available please provide this data in an attachment to the application. WQBELs for toxic pollutants are incorporated into an NPDES permit when the DEQ has determined that a substance is or may be discharged into the receiving waters at a level that has a reasonable potential to exceed the substance's water quality value. The determination is made using the procedure described in the Part 8 Rules of Act 451, Public Acts of 1994 as amended. (See page 7 in the appendix)

Check this box if additional information is included as an attachment. Maximum is THE PARTY DESCRIPTION Monthly Quantification Level Used Toxic Pollutant (ug/l) Individual Samples (ug/l) Grab 24 Hr Comp • 7 6 5 3 2 1 Grab 24 Hr Comp 10 8 7 6 5 3 2 1 Grab

			l l]		ļ		1	24 Hr Comp
1	2	3	1	5	6	7	•	9	10
☐ No, Cor	a above listed loxinatione to question	7. .		€ Ye	s, Plea	ase read below.	om, and discha	arged to the	same body
of water may	quality for intake	credits for those	toxic pollutants.	See Rule 1211	J	at are miliorania			C (Rev 1/00

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Michigan Department of Emironmental Quality-Surface Water Quality Division WASTEN TER DISCHARGE PERM' APPLICATION

SECTION III - Industrial and Commercial Wastewater

PLEASE TYPE OR	PRINT	C. Signature Page	90
FACILITY NAME	Plainwell Inc.	NPDES PERMIT or CO	OC NUMBER MIOO03794
10. * CERTIFICATX Rule 323.2114 follows:		1 451, Public Act of 1994, Part 31, as am	nended, requires that this application be signed
responsible B. For a partn C. For a sole p D. For a munic	lor the overall operation of the facility from ership, by a general partner. proprietorship, by the proprietor.	m which the discharge described in the po	designated representative if the representative ermit application or other NPDES form originate village president, city or village manager or other
designed to as: who manage to knowledge and	sure that qualified personnel properly gath he system, or those persons directly res	er and evaluate the information submitted ponsible for gathering the information, t m aware that there are significant penaltic	ction or supervision in accordance with a system 1. Based on my inquiry of the person or person the information submitted is, to the best of m ies for submitting talse information, including the
Print Name:	Robert D. Bradsher	Title:	Mill Manager
Representing:	Plainwell Inc Plainw	well MI.	

This completes Section III. Section III must be completed for all applicants requesting authorization to discharge wastewater(s) from an industrial or commercial facility to a surface water of the state. When Section I and III are complete please the return application to the appropriate district office (see pages 2 and 3 of the appendix for district office addresses and a map of district boundaries).

Kriller Dale: 3/29/00

If assistance is needed in determining the appropriate sections to complete or if assistance is needed completing this application contact the appropriate district office.

SWOD-DIAMWED

Hercules Incorporated (Pulp and Paper Division (Great Lakes District 576 Romence Road Suite 126 Portage, MI 49024 616 327-2560 616 327-1467 Fax

March 16, 2000

Mr. Khaja Naimuddin Simpson Plainwell Paper Company 200 Allegan Street Plainwell, MI 49080

Re: Spectrum RX3100, Spectrum RX4100 and Spectrum RX6800

Dear Mr. Naimuddin:

I am writing to you at Tracy Clevenger's request regarding the above-listed biocides.

This letter will certify that none of the biocides listed-above contain any chlorinated phenolic compounds.

STORY.

If you have any further questions regarding this information, please let me know.

Best Regards,

Claire Girard

Product Stewardship Coordinator

Ptainwell Inc. 1270 Northland Drive, Suite Minneapolis, MN 55120 651-406-9977

October 17, 2000

RECEIVED

OCT 17 2000

SWQD-PLAINWELL

Mr. Steve Norton SWQD Michigan Department of Environmental Quality 1342 SR-89 West Plainwell, Michigan 49080-1915

Dear Mr. Norton,

I am submitting this letter as part of the NPDES permit application for waiving the parameters of section III and item No. 6 (page 28 of the permit application) for the Outfall 006 and 007 due to the following reason:

The Outfall 006 and 007 are for discharging non-contact pump test water for fire protection from two separate wells and no process water is drawn from these well.

If you have any questions, please contact me at (616)685-2537.

Respectfully,

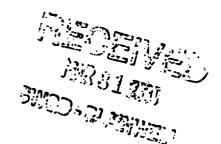
Khaja Naimuddin

Environmental Superintendent

APPENDIX A: MINOR MODIFICATION(S) TO NPDES PERMIT NUMBER MI 0003794

MOD. NO.	EFFECTIVE DATE	MODIFICATION LANGUAGE	AUTHORIZED BY:
1.	1/8/97	On page 4 of 20, Part I.A.2, change the reporting requirements for outfalls 006 and 007 to read, "Retained Self-Monitoring Requirements (see page 14 of 20, Part II.C.3.)" This will affect page 4 of 20	D. Dell
		only.	
2.	9/5/97	Name change from Simpson Plainwell Paper Company to	D. Dell
		Plainwell Paper Co. The designated name will also change from Simpson Plainwell Paper Co to Plainwell Paper Co. This will affect the cover page only.	
3.	12/1/98	Name change from Plainwell Paper Co to Plainwell Inc. The designated name will also change from Plainwell Paper Co to Plainwell Inc. These changes will affect the cover page only.	D. Dell
			-
		RECEIVE	
		RECEIVE OCT 17 2000 SWQD-PLAINWEIL	D
		PEAINWELL	
		``	

OUTFALL 006



WAS I EWATER DISCHANGE FEDIVILL AFFLICATION

SECTION III - Industrial and Commercial Wastewater

SECTIN III - Industrial and Commercial Wastewater

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank section the application if necessary.

PLEASE TYPE OR PRINT

	ell Inc.			000	or COC NUME 13794	JER	OUTFALL NUMB 006
OUTFALL INFORMATION (See	page 24 for Instruc	ction on con	npletion of t	his page)			
A. Watershed		Kalamaz	zoo Rive	er			-
B. Receiving Water		Kalamaz	oo Rive	er			
C. County Allegan				Township		Gun Plai	n
D. SE 14, 14	NE	×	Section	30	Town 01	N	Range 11W
E. Latitude 042	26	36		Longitude	085	38	33
F. Type of Wastewater Dischar	roed (Check all tha	at apolyi:					
☐ Contact Cooling			nilary Wasl	ewater		Storm Wa	iter (regulated)
* Noncontact Cooling		O Pro	cess Wasie	ewal er		☐ Storm Wa	iter (not regulated)
•	o7					M. No. Confin	Nee with Rem G
·	o7					M No, Contin	ive with Rem G
Other - specify G. Is this a Seasonal Discharge Yes, List the discharge pe	e? infods (by month) in			low.			h
Other - specify G. Is this a Seasonal Discharge Yes, List the discharge pe	o? infods (by month) in Through			low.		Throug	h
Other - specify G. Is this a Seasonal Discharge Yes, List the discharge pe	oriods (by month) in Through			from From		Throug	h h
Other - specify G. Is this a Seasonal Discharge Pers, List the discharge perform	oriods (by month) in Through		provided be	from From	s/day	Throug	h
Other - specify G. Is this a Seasonal Discharge Yes, List the discharge pe From From H. Discharge Schedule (Yearly	oriods (by month) in Through Through Average):		provided be	From hour	s/day	Throug	h h
Other - specify G. Is this a Seasonal Discharge Yes, List the discharge pe From From H. Discharge Schedule (Yearly	oriods (by month) in Through Through Average):	n the space	provided be	From hour	Skday VEI)	Throug Throug	h h days
Other - specify G. Is this a Seasonal Discharge Yes, List the discharge pe From From H. Discharge Schedule (Yearly	arge Flow Rates:	n the space	provided be	From From Average 21 312	s/day	Throug Throug	h h

* Noncontaminated and self monitorig outfall for dischaging test water for fire pump.

WOD. TINKE

WASTEWATER DISCHARGE PERMIT APPLICATION
SEC IN III - Industrial and Commercial astewater

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank section of the application if precessary of the application if necessary.

PLEAS	SE TYPE OR PRINT					
FACIL	ITY NAME PLAINWELL INC.		NPDES PERMIT of MI0003794	COC NUMBER	ou	TFALL NUMBER
4. Y	VATER TREATMENT ADDITIVES					
•••	Is there a discharge of any water tre	eatment additives or chemicals u	sed to treat water an	Vor wastewater u	sed or generaled i	by this facility ?
•	No, Continue with Item 5.				•	ey === radiaty r
	Yes, Provide the following info	ormation for each additive. P	rovide the Material	Safety Data She	els (MSDS) for	each additive as an
		Enter the product name of the a				
	e.g., biocide, corrosion inhibito	r, etc. Provide the average an	d maximum propose	d discharge cond	centrations of the	additive. Enter the
	concentrations of the proposed	additives after all treatment has o oichiometry and/or a mass balan	occurred, it line actu on Provide the omo	m proposea aiscn	arge concentration	is are not known, an
	week or year.	OCHOTHOLIY GROUP & HIESS OCION	ce. Provide the prop	OSOU GISCHERGE III	equency in nours p	ser cay and days per
•			Discharge Con	zentrations ***		
- Р	roduct Name/Name of Manufacturer	Additive Function	>: Average : .	Maximum : Y	Discharge	Frequency
			Dµg/t	1 Ngų □	hours/day	☐days/w
			Dmg/l	□mg/I		□days/yr
			ΛομΩ	. Neu⊡	hours/day	□days/w/
			□mg/l	□mg/I		□days/yr
			Pout□	Dµg/t	hours/day	Ddays/wk
			Dmg/l	□mg/I		□days/yr
			ПочП	- Pou	hours/day	
			Dmg/1	Omg/I	,	Odays/wk
			 		hours/day	Odays/yr
			Ngu□ Ngm□	Ngų□ Ngm□	Housbay	□days/wk
						
			Ngμ□ Ngm□	Deg(1 Ngm□	hours/day	☐days/wk
			Dµg/i	NeuC	hours/day	Odays/yr Odays/wk
		1	1 Pgm□	Dmg/l	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Odays/yr
			Оμол	Ngų□	hours/day	□days/wk
		<u> </u>	Dmg/l	□mg/I		Ddays/yr
В	Table 11 contains a list of the addition the additive this facility is proposing and Environmental Assessment Se any additional information. If the Difacility, the applicant must provide a sp.) and the results of a toxicity test minimum requirement of Rule 323 discharge authorization unless the a	to discharge is not included in T ction at 517-335-4184 to inquire PEQ does not have sufficient too 48-hour EC50 for a North Ameri for one other North American Fi 1057(2)(a) of the Part 4 Water	Table 13 in the append about the status of acological information ican planktonic crusta reshwater aquatic spo Quality Standards, 3	fix, call the Surfac the specific water I for any additive Icean (Daphnia sp Iccies (other than a	e Water Quality Di treatment additive being proposed to be, Ceriodaphnia sp a planktonic crustae	vision, Great Lake prior to providing r discharge at this o. or Simocephalus cean) that meets a
	Aquatic toxicity data is attached	•				•
C	i. If the discharge is treated to remove the treatment process:	any of the above additives prior	to discharge, indicate	which additive the	e treatment is for a	nd briefly describe
	·	,		ين فيد 🐣	Street to a second	
			•	= , =		•
				ر د م نسد ه د د د		
	•			r_{ij}	31789	•
					~	
					Si silinina	•

WAS IEWATED DISCHANGE CELIMINA OF CENT

SEC ON III - Industrial and Commercial Wastewater

B. Outfall information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank section of the application if necessary.

PLEASE TYPE OR PRINT

	006
s for this discharge. The information required to list of various industries and the types of inform strict office (see pages 2 and 3 of the appendix) SIC) code for the process. If the wastestream is we the reasonable potential to be present in the	be reported is dependent of ation each shall report in thi . All industries shall provide s not regulated under federa
NA Instructions to determine the appropriate inform	ation to be reported):
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	ist of various industries and the types of informatical office (see pages 2 and 3 of the appendix SIC) code for the process. If the wastestream is we the reasonable potential to be present in the set the reasonable potential to be present in the set the reasonable potential to be present in the set the reasonable potential to be present informations. Instructions to determine the appropriate informations tructions to determine the appropriate informations tructions to determine the appropriate informationstructions to determine the appropriate informations the appropriate informations to determine the appropriate informations the appropriate information the appropriate informations the appropriate information the

SECTON III - Industrial and Commercial astewater

B. Outfall Information

Complete a separate Section III.B.- Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank of the application if necessary.

PLEASE TYPE OR PRINT

FACILITY NAME PLAINWELL INC.		NPDES PERMIT (x COC NUMBER 794	OUT	FALL NUMBER OOG
6. WASTEWATER CHARACTERISTICS - CONVENTION	ONAL POLLUTANT	S - Instructions for o	completing this page	ere on the facing	
☐ Check this box if additional information is included					hafer
Parameter NA	Maximum Daily Concentration	Maximum Monthly Concentration	z-Units	Number of	
Biochemical Oxygen Demand - five day (BODs)			mg/l	· voidyses :	Sample Type
COD (Chemical oxygen demand)			Ngm		☐ 24 Hr Corn
TOC (Total organic carbon)			. mg/l		D 24 Hr Com
Ammonia Nitrogen (as N)			mg/l		O 24 Hr Come
Total Suspended Solids			mg/l		C Grab
Total Dissolved Solids			mg/l		Grab
Total Phosphorus (as P)			mg/l		C 24 Hr Comp
Fecal Coliform Bacteria (report geometric means)	maximum-7day		counts/100ml		D 24 Hr Comp
Total Residual Chlorine			Ngm Ngu		Grab
Dissolved Oxygen	minimum dally	Do Not Use	mg/t		Grab
pit (report maximum and minimum of individual samples)	minimum	maximum	Standard Units	 , - , 	Grab
Temperature, Summer			*F *C		Grab
Temperature, Winter			* °C		Grab
Ol & Grease			mg/l		Grab
					Grab 24 Hr Comp
					Grab 24 Hr Comp
		1	2		Grab 24 Hr Comp
			STA		☐ Grab
		1	و ا		24 Hr Comp
		7	CENTE		Grab
		\ \ \	TO		☐ 24 Hr Comp
					24 Hr Comp Grab
	·				24 Hr Comp Grab
					24 Hr Comp

ION III - Industrial and Commerci Vastewater

B. Outfall Information

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this bland cection of the application if necessary.

PLEASE TYPE OR PRINT FACILITY NAME NPDES PERMIT OF COC NUMBER

~~	~	PLAINWELL INC.		HI0003794	OO 6
7.	Co	IIMARY INDUSTRY TOXIC POLLUTANT INF		ited in item 1 of this section. If this is not	
	For	th Item 8. r two or more substantially identical outlails, as outlail and submit the results of the analysis terrative describing which outlail was sampled a sampled.	for other substantially i	dentical outlail(s). If the request is granted by	y the district supervisor anam
	A	Indicate if the discharge from this outfall co check "YES" and continue with B below. If it with item 8. Does this outfall discharge conti	he discharge from this	outfall does not contain any process wastewa	contains process wastewater, ater, check "NO" and continue
		Yes, Continue with B.	No, Continue with	item 8.	
	В.	Primary Industries must submit test results fe each industrial category. Indicate the GC/MS			I GC/MS fractions required by
		☐ Volatile	☐ Base/Neutral	☐ Acid	D Pesticide
	3 in	wide analytical data for each parameter of the in the appendix. Provide copies of the analytic cess wastewater shall provide quantitative da 2,3,7,8-TCDD (Dioxin) unless they believe it is	cal results or record the ita for the parameters s	information in Item 9. Additionally, all prima pecified in Table 4 in the appendix. Applicant	ry industries which discharge
•	A.	DITIONAL TOXIC POLLUTANT INFORMAT. If an applicant, regardless of the type of disc appendix) is discharged from any outfall, ther	charge, knows or has re		ables 3, 4, 5, 7 and 8 (in the
		Not Applicable/Believed Absent	Present, Data is a	ttached or recorded in Item 9.	
		If an applicant (primary or secondary indust Table 6 (in the appendix) are discharged from available quantitative data.			
		Not Applicable/Believed Absent	Present, Data is at	tached or recorded in item 9.	
		All applicants (primary and secondary in Trichlorophenoxy) propancic scid (Silvex); trichlorophenyl) phosphorothicate (Ronnel); analytical calibration procedures. All surfact befleve that 2,3,7,8-Tetrachlorodibenzo-p-dioxscreening procedure not calibrated with analy	2-(2,4,5-Trichlorophenol 2,4,5-Trichlorophenol te water discharge appirion (TCDD) is or may be	enoxy) ethyl 2,2-Dichloroproprionate (Erbo (TCP); or Hexachlorophene (HCP) <u>must</u> licants (primary and secondary industries) w present in their discharge <u>must</u> report qualit	n); 0,0-Dimethyl 0-(2,4,5- report data using standard who know or have reason to
	,	Not Applicable/Believed Absent	Present, Data is at	tached or recorded in Item 9.	
		If the applicant knows or has reason to belie applicant's discharges or on a receiving water			
		X Not Applicable	Applicable, Data is	attached.	
		If a contract laboratory or consulting firm per laboratory or firm as an attachment to this ap		yses required by this application, provide the	name and address of each
	,	Not Applicable	Applicable, Informa	ation is provided.	
•	F. (Does the facility discharge any other loxic or i	injurious chemical subst	ances not listed in Tables 3 through 9 in the ap	ppendix 7
	•	No, Continue with Section III.C.	D Yes, Data is attach	ed or recorded in Item 9,	
			77	RECEIVED	

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STOTION III - Industrial and Commercial

Wastewater

B. Outlast Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blan of the application if necessary. NA

PLEASE TYPE OR PRINT

FACILITY NAME PLAINWELL INC.	NPDES PERMIT or COC NUMBER MI0003794	OUTFALL NUMBER

EFFLUENT CHARACTERISTICS - TOXIC POLLUTANTS Ω.

This worksheet is to be used by applicants to record information on any Michigan Critical Material, EPA Priority Pollutant, or hazardous substance for which this application requires that data be provided. This includes any substance from Table 3 which lists Organic Toxic Pollutants, Table 4. Other Toxic Pollutants, Table 5, Conventional and Nonconventional Pollutants, Table 6, Toxic Pollutants and Hazardous Substances, Table 7 the Michigan Critical Materials Register, or Table 8 the EPA Priority Pollutant Listing (in the appendix). If the applicant believes a pollutant may be present in the effluent that is not included in these lists, data shall be provided for that pollutant with this application. This information may also be included as an attachment to this application on 8 1/2"x 11" paper. Page 12 of the appendix is a list of minimum testing requirements for various dischargers. As a minimum, applicants for those types of discharge must provide analytical data based on that list.

Applicants shall use EPA approved analytical methods when conducting sampling (40 CFR 136). For each parameter provide the name of the parameter as listed in the Tables, the maximum daily and monthly discharge concentrations, units, the number of analyses performed, and the sample type. If analytical results for a composite sample are being provided and the sample is not a 24-hour composite, include a description of the sample collection technique used as an attachment to this application on 8 1/2" x 11" paper. When calculating an average where some values are detectable and others are nondetectable, either provide the actual data, or regard each nondetectable value as the detection level when calculating concentrations and indicate that the result is "less than" the value reported. (See definitions of "daily concentration" and "monthly concentration" in the general provisions at the front of this form.) Please include an explanation if "Pollution Prevention" is expected to provide reductions of pollutants. (See page ii and iii for sampling definitions, including, "daily concentration", and "monthly concentration".) See Table 12 in the appendix for acceptable "Levels of Quantification".

In addition to the maximum daily and maximum monthly concentrations required above the applicant must provide individual sample data to determine if Water Quality Based Effluent Limits (WOBELs) are necessary. If more than 10 individual samples results are available please provide this data in an attachment to the application. WQBELs for toxic pollutants are incorporated into an NPDES permit when the DEQ has determined that a substance is or may be discharged into the receiving waters at a level that has a reasonable potential to exceed the substance's water quality value. The determination is made using the procedure described in the Part 8 Rules of Act 451, Public Acts of 1994 as amended. (See page 7 in the appendix)

Check this box if additional information is included as an attachment.

				Individual Sam	ples (ug/I)				
			a constant	• •:		-			Grab 24 Hr Comp
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									Grath 24 Hr Comp
1	2	3	4	5	6	7	8	9	10
									Grab 24 Hr Comp
1	2	3	4	5	6	7	8	9	1(

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ScCTION III - Industrial and Commercial Wastewater

C. Signature Page

PLEASE TYPE OR PRINT FACILITY NAME

Plainwell Inc.

NPDES PERMIT or COC NUMBER

MI0003794

10. CERTIFICATION

Rule 323.2114(1-4) of the Part 21 Rules of Michigan Act 451, Public Act of 1994, Part 31, as amended, requires that this application be signe

- A. For a corporation, by a principal executive officer of at least the level of vice president, or their designated representative if the representative responsible for the overall operation of the facility from which the discharge described in the permit application or other NPDES form originar B. For a partnership, by a general partner.
- C. For a sole proprietorship, by the proprietor.
- D. For a municipal, state, or other public facility, by either a principal executive officer, the mayor, village president, city or village manager or of

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a syst. designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or person who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of a knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting laise information, including t

Print Name:	Robert D. Bradsher Tide: Mill Manager
Representing:	Plainwell Inc Plainwell MI.
Signature:	tildet Malles Date: 3/29/00

This completes Section III. Section III must be completed for all applicants requesting authorization to dischar wastewater(s) from an industrial or commercial facility to a surface water of the state. When Section I and III : complete please the return application to the appropriate district office (see pages 2 and 3 of the appendix (district office addresses and a map of district boundaries).

If assistance is needed in determining the appropriate sections to complete or if assistance is needed completing this application contact the appropriate district office.

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SECTI 1111 - Industrial and Commercial Wastewater

B. Outlal Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank section the application if necessary.

HAM YTL	Æ.	Plainwel	1 Inc.		, i	000	3794			WIFALL	007
XVTFALL	INFORA	AATION (see pa	ige 24 for Instin	uction on con	npletion of thi	s page)					
Wa	lershed			Kalamaz	oo Rive	r					
3. Rec	ecelving Water Kalamazoo Rive				oo Rive	······································					
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-	SE	¥, ¥	NE	K	Section ,	30	Town	OlN	Ra	nge 111	1
_	litude	042	26	36	<u>. </u>	Longitude	085	38	33		
	of Waste	waler Discharge oling	ed (Check all t		nitary Waster	waler		☐ Ston	m Waler (r	egulated)	
* 16 No	oncontact	Cooling		O Pro	ocess Wastev	valer		☐ Ston	m Waler (n	ot regulat	ed)
Sk	her - spe	onal Discharge?									· .
Sk	her - spe	cify						·	Continue w	ith Item G	;
Oti	her - spe	city	ods (by month)					T		ith kern G	;
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* Noncontaminated and self monitorig outfall for dischaging test water for fire pump.



PLEASE TYPE OR PRINT

SEC JN III - Industrial and Commercial astewate

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank of the application if necessary.

of the application if necessary. PLEASE TYPE OR PRINT					0
FACILITY NAME PLAINWELL INC.		NPDES PERMIT MI000379	or COC NUMBE	A	OUTFALL NUMBER
4. WATER TREATMENT ADDITIVES					
A. Is there a discharge of any water treat	ment additives or chemicals u	sed to treat water a	nd/or wastewater	r used or genera	led by this facility 2
No, Continue with Item 5.				•	
Yes, Provide the following inform	nation for each additive.	Proude the Material	l Safaty Data Si	hade (MSOS)	for each addition
attachment to this application. En	ter the product name of the a	idditive and name of	f the manufacture	er. Describe the	for each accing as an
e.g., biocide, corrosion inhibitor,	etc. Provide the average an	nd maximum propos	sed discharge co	oncentrations of	the additive. Enter the
concentrations of the proposed ad	ditives after all treatment has	occurred. If the act	wal proposed dis	charge concentr	ations are not known, an
estimate shall be made using sloid	chiometry and/or a mass balar	nce. Provide the pro	posed discharge	frequency in ho	urs per day and days per
week or year.	refreedom some and and	Discharge Co	ncántrationa · · ·	nego e jegon	F. Zirking Company
Product Name/Name of Manufacturer	Additive Function			V Disch	arge Frequency
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-		lom□	□mg/I		□days/yr
		اموس□	Оμ9∕1	hours/day	
		□mg/l	Dmg/l	_	Ddays/yr
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		Dmg/l			Odays/yr
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		□mg/i	Omg/	•	□ days/yr
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			Dmg/l	•	□ days/yr
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		Nom	Omg/l		Ddays/yr
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			Nom D		Odays/yr
		Прод	Dµg4	hours/day	,
		NgmU	Dmg/l		□ days/yr
B. Table 11 contains a fist of the additive the additive this facility is proposing to and Environmental Assessment Section and Environmental Assessment Section and additional information. If the DEI facility, the applicant must provide a 4-sp.) and the results of a toxicity test for minimum requirement of Rule 323.10 discharge authorization unless the application and the section of the secti	discharge is not included in 1 on at 517-335-4184 to inquire 2 does not have sufficient to: 8-hour ECS0 for a North Amer or one other North American F 157(2)(a) of the Part 4 Water	Table 11in the apper about the status of declogical information from planktonic crus reshwater aquatic sp Quality Standards.	ndix, call the Surf if the specific wall on for any additiv tacean (Daphnia pecies (other than	ace Water Cuali ler treatment ad le being propose sp., Ceriodaphol n a planktonic co	hy Division, Great Lake diffive prior to providing and for discharge at this la sp. or Simocephalus ustacean) that meets a
C. If the discharge is treated to remove a the treatment process:	ny of the above additives prior				
		A	ECE	VED	
			MR31	2900	

EQP 4659-C (Rev 1/00)

SWOD-PLAINWELL

SEC ON III - Industrial and Commercial Wastewater

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank so of the application if necessary.

P	LE	USE	Π	P	E	OR	P	MI	r

FA	PLAINWELL INC.	MI0003794	OUTFALL NUMBER
5.	PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE		<u> </u>
	This information is used to determine the applicable federal regulations the type of facility. Page 11 of the appendix contains an abbreviated its application. Assistance can be received by calling the appropriate distribution of each process and the Standard Industrial Classification (Stategorical standards, the applicant shall report all pollutants which have	it of various industries and the types of inform rict office (see pages 2 and 3 of the appendinc) IC) code for the process. If the wastestream	mation each shall report in this ix). All industries shall provide its not regulated under federal
	Make additional copies of this page if necessary.		
	PROCESS INFORMATION	NA	
	A. Name of the process contributing to the discharge:		
	B. SIC code:		
	C. Describe the process and provide measures of production (see the la	nstructions to determine the appropriate infor	mation to be reported);
	PROCESS INFORMATION		
	A. Name of the process contributing to the discharge:		
	B. SIC code:		
	C. Describe the process and provide measures of production (see the in	nstructions to determine the appropriate inform	nation to be reported);
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,	A. Name of the process contributing to the discharge:		
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	C. Describe the process and provide measures of production (see the in	istrictions to determine the appropriate inform	alion to be reported):
	PROCESS INFORMATION		
	A. Name of the process contributing to the discharge:		
	B. SIC code:		
	C. Describe the process and provide measures of production (see the in	structions to determine the appropriate informa	ation to be reported):
		_	



WASTEWATER DISCHARGE PERMIT APPLICATION

SF ~ION III - Industrial and Commerc · Wastewater

B. Outfall Information

Complete a separate Section III.B.- Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this bland of the application if necessary.

PLEASE TYPE OR PRINT

B. WASTEWATER CHARACTERISTICS - CONVENTIONAL POLLUTANTS - Instructions for completing this page are on the facing page. Check this box if additional information is included as an attachment. Maximum Daily Concentration — Junits — Maximum Monthly Concentration — Junits — Sample Ty Concentration — Junits — Ju	PLAINWELL INC.		MI0003	794	OUTI	ALL NUMBER 007
Check this box if additional information is included as an attachment.	6. WASTEWATER CHARACTERISTICS - CONVENTI	ONAL POLLUTANT	S - Instructions for c	ompleting this page	are on the facing	
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Duilty Concentration Con		Maximum	Maximum	T	T .	· · · · · ·
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COD (Chemical oxygen demand)	Biochemical Oxygen Demand - five day (BODs)			mg/l		
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MAR 3 1 200 Grab 24 Hr Con Grab 1 24 Hr Con Grab 1 24 Hr Con			3 1 E	EIVE	`	
31 200 24 Hr Cor			- A44		<i></i>	
Grab]	- TOTAL	31 man T	_	
DEATHWELL D Grab D 24 Hr Cor			38000			
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□ 24 Hr Cor				-MANET		
					}	

MOTETATED DISCHARGE LETTIVITY AFFEICATION

SECTION III - Industrial and Commercial 'Mastewater

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (pages 24-30) for each outfall at the facility. Make copies of this blank set of the application if necessary.

PLEASE TYPE OR PRINT

FACILITY NAME
PLAINWELL INC.

NPDES PERMIT OF COC NUMBER
MI0003794

OUTFALL NUMBER
OUTFALL NUMBER
OUTFALL NUMBER
OUTFALL NUMBER

9. EFFLUENT CHARACTERISTICS - TOXIC POLLUTANTS

This worksheet is to be used by applicants to record information on any Michigan Critical Material, EPA Priority Pollutant, or hazardous substance for which this application requires that data be provided. This includes any substance from Table 3 which lists Organic Toxic Pollutants, Table 4. Other Toxic Pollutants, Table 5. Conventional and Nonconventional Pollutants, Table 6, Toxic Pollutants and Hazardous Substances, Table 7 the Michigan Critical Materials Register, or Table 8 the EPA Priority Pollutant Listing (in the appendix). If the applicant believes a pollutant may be present in the effluent that is not included in these lists, data shall be provided for that pollutant with this application. This information may also be included as an attachment to this application on 8 1/2 x 11° paper. Page 12 of the appendix is a list of minimum testing requirements for various dischargers. As a minimum, applicants for those types of discharge must provide analytical data based on that list.

Applicants shall use EPA approved analytical methods when conducting sampling (40 CFR 136). For each parameter provide the name of the parameter as listed in the Tables, the maximum daily and monthly discharge concentrations, units, the number of analyses performed, and the sample type. If analytical results for a composite sample are being provided and the sample is not a 24-hour composite, include a description of the sample collection technique used as an attachment to this application on 8 1/2" x 11" paper. When calculating an average where some values are detectable and others are nondetectable, either provide the actual data, or regard each nondetectable value as the detection level when calculating concentrations and indicate that the result is "less than" the value reported. (See definitions of "daily concentration" and "monthly concentration" in the general provisions at the front of this form.) Please include an explanation if "Pollution Prevention" is expected to provide reductions of pollutants. (See page ii and iii for sampling definitions, including, "daily concentration", and "monthly concentration".) See Table 12 in the appendix for acceptable "Levels of Quantification".

In addition to the maximum daily and maximum monthly concentrations required above the applicant must provide individual sample data to determine if Water Quality Based Effluent Limits (WOBELs) are necessary. If more than 10 individual samples results are available please provide this data in an attachment to the application. WQBELs for tooic pollutants are incorporated into an NPDES permit when the DEQ has determined that a substance is or may be discharged into the receiving waters at a level that has a reasonable potential to exceed the substance's water quality value. The determination is made using the procedure described in the Part 8 Rules of Act 451, Public Acts of 1994 as amended. (See page 7 in the appendix)

Check this box if additional information is included as an attachment.

						ples (ug/l)	Styldual Sam	Ind				
Grab 24 Hr Con		•					**					·
	9		8	7			5	1		3	2	1
Grab 24 Hr Con									•-			
	9			7		•	5	4		3	2	1
Grab 24 Hr Corn												
211110011	9			 7	Γ	6	5	1	· · · · · · · · · · · · · · · · · · ·	3	2	1

Are any of the above listed toxic pollutants present in the facility's supply water?

No. Continue to question 7.

O Yes, Please read below

In accordance with Rule 1211(7), facilities whose supply water contains toxic po of water may qualify for intake credits for those toxic pollutants. See Rule 1211(7)

colors are industries and ischarged to the same body

PHR 31 2000

Michigan Department of Environmental Quality- Surface Water Quality Division WAST WATER DISCHARGE PE! AIT APPLICATION

SECTION III - Industrial and Commercial Wastewater

PLEASE TYPE OF	PRINT	C. Signature Page	963
FACILITY NAME	Plainwell Inc.	NPDES PERMIT or COC NUMBER	03794
10. CERTIFICATI	ON	(4)00	73/94
Rule 323.2114 follows:	(1-4) of the Part 21 Rules of Michigan Act 4	51, Public Act of 1994, Part 31, as amended, requires that this a	pplication be signe
A. For a corpo responsible	oration, by a principal executive officer of at le to the overall operation of the facility from t	east the level of vice president, or their designated representative which the discharge described in the permit application or other N	If the representation
		and the sum of the sum	PDES form original
C. For a sole p	proprietorship, by the proprietor.		•
D. For a munic duly authori	cipal, state, or other public lacility, by either a ized employee.	principal executive officer, the mayor, village president, city or vi	lage manager or of

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a syst. dosigned to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or person who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of i knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting talse information, including t possibility of line and imprisonment for having knowledge of violations."

Print Name:	Robert D. Bradsher	Tite:	Mill Manager
Representing:	Plainwell Inc Plainwell MI.		
Signature:	Wolat Moulles	Date:	3/29/00

This completes Section III. Section III must be completed for all applicants requesting authorization to dischar wastewater(s) from an industrial or commercial facility to a surface water of the state. When Section I and III : complete please the return application to the appropriate district office (see pages 2 and 3 of the appendix district office addresses and a map of district boundaries).

If assistance is needed in determining the appropriate sections to complete or if assistance is needed completing this application contact the appropriate district office.

3WQD-PLAINWELL

_ABORATORY DETAIL REPORT

Client: Plainwell Paper Company

KAR Project No.: 00

Date Reported:

Project

Desc. : Analysis of one sample for Wastewater Discharge Application.

Sample ID: "Outfall 005, 24 Hr. Composite"

Sampled By: DH of Plainwell Paper

Sample Date: 03/15/2000

Sample Time:

Date Received: 03/16/2000 Sample Type: **eque**ous

KAR Sample No.: 001249-01

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Prior. Poll. acids	See below	•	EPA 8270	03/27/00	KTL	
Prior. Poll. base-neutrals	See below		EPA 8270	03/27/00	KTL	
Prep, SV Acid/BN	Completed	<u> </u>	EPA 625	03/21/00	SAS	
1,2,4-Trichlorobenzene 8270	<5	ug/L	EPA 8270	03/27/00	KTL	
1,2-Dichlorobenzene by 8270	<5	Ug/L	EPA 8270	03/27/00	KTL	
1,2-Diphenylhydrazine	<5	Ug/L	EPA 8270	03/27/00	KTL	
1,3-Dichlorobenzene by 8270	<5	ug/L	EPA 8270	03/27/00	KTL	
1,4-Dichlorobenzene by 8270	<5	ug/L	EPA 8270	03/27/00	KTL	
2,3,7,8-TCDD by 8270	<5	ug/L	EPA 8270	03/27/00	KTL	
2,4,6-Trichlorophenol	<5	ug/L	EPA 8270	03/27/00	KTL	
2,4-Dichlorophenol	<5	ug/L	EPA 8270	03/27/00	KTL	
2,4-Dimethylphenol	<5	ug/L	EPA 8270	03/27/00	KTL	
2,4-Dinitrophenol	<20	ug/L	EPA 8270	0327700	KTL	
2,4-Dinitrotoluene	<5	ug/L	EPA 8270	03/27/00	KTL	
2,6-Dinitrotoluene	 <5	ug/L	EPA 8270	03/27/00	KTL	
2-Chloronaphthalene	<5	l ua/L	EPA 8270	03/27/00	KTL	
2-Chlorophenol	<5	ug/L	EPA 8270	03/27/00	KTL	
2-Methyl-4,6-dinitrophenol	<20	ug/L	EPA 8270	03/27/00	KTL	
2-Nitrophenol	<5	ug/L	EPA 8270	03/27/00	KTL	
3,3'-Dichlorobenzidine	<20	l ug/L	EPA 8270	03/27/00	KTL	
4-Bromophenyl phenyl ether	<5	ug/L	EPA 8270	03/27/00	KTL	
4-Chloro-3-methylphenol	<5	ug/L	EPA 8270	03/27/00	KTL	
4-Chlorophenyl phenyl ether	<5	ug/L	EPA 8270	03/27/00	KTL	***
4-Nitrophenol	<20	ug/L	EPA 8270	03/27/00	KTL	
Acenaphthene	<5	ug/L	EPA 8270	03/27/00	KTL	
Acenaphthylene	<5	ug/L	EPA 8270	03/27/00	KTL	
Anthracene	<5	ug/L	EPA 8270	03/27/00	KTL	
Benzidine	<50	Ug/L	EPA 8270	03/27/00	KTL	
Benzo(a)anthracene	<5	ug/L	EPA 8270	03/27/00	KTL	
Benzo(a)pyrene	<5	ug/L	EPA 8270	03/27/00	KTL	
Benzo(b)fluoranthene	<5	Ug/L	EPA 8270	03/27/00	KTL	
Benzo(ghi)perylene	<5	ug/L	EPA 8270	03/27/00	KTL	
Benzo(k)fluoranthene	<5	ug/L	EPA 8270	03/27/00	KTL	
Bis(2-chloroethoxy)methane	<5	Ug/L	EPA 8270	03/27/00	KTL	
Bis(2-chloroethyf)ether	<5	ug/L	EPA 8270	03/27/00	KTL	
Bis(2-chloroisopropyl)ether	<5	Ug/L	EPA 8270	03/27/00	KTL	
Bis(2-ethylhexyl)phthalate	38	ug/L	EPA 8270	03/27/00	KTL	
Butylbenzyl phthalate	<5	ug/L	EPA 8270	03/27/00	KTL	
Chrysene	<5	ug/L	EPA 8270	03/27/00	KTL	
Di-N-butylphthalate	<5	ug/L	EPA 8270	03/27/00	KTL	
Di-n-Octyl phthalate	<5	lug/L	EPA 8270	03/27/00	KTL	
Dibenzo(ah)anthracene	<5	lug/L	EPA 8270	03/27/00	KTL	
Diethyl phthalate	! <5	l ug/L	EPA 8270	03/27/00	KTL	
Dimethyl phthalate	<5	ug/L	EPA 8270	03/27/00	KTL	
Fluoranthene	<5	ug/L	EPA 8270	03/27/00	KTL	
I IVA GIUIDIR	<u>,~</u>	I OSP C	15-40510	1 0327700		

KAR Laboratories, Inc.

(616) 381-9666 **Laboratory Detail Report** Page 1 of 3

光况812第

SMOD - PLANWELL.

LABORATORY DETAIL REPORT

Client: Plainwell Paper Company

KAR Project No.: 0012

Date Reported:

03/28/0

Project

Desc.: Analysis of one sample for Wastewater Discharge Application.

Sample ID: "Outfall 005, 24 Hr. Composite"

<0.1

<0.1

<0.1

<0.1

<0.1

ug/L

ug/L

ug/L

ug/L

ug/L

Sampled By: DH of Plainwell Paper

Sample Date: 03/15/2000

Sample Time:

PCB Aroclor 1232

PCB Aroclor 1242

PCB Aroclor 1248

PCB Aroclor 1254

PCB Aroctor 1260

Date Received:

03/16/2000

Sample Type: KAR Sample No.:

aqueous 001249-01

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Fluorene	<5	ug/L	EPA 8270	03/27/00	KTL	
Hexachlorobenzene	<5	ug/L	EPA 8270	03/27/00	KTL	
Hexachlorobutadiene	<5	ug/L	EPA 8270	03/27/00	KTL	
Hexachlorocyclopentadiene	<5	ug/L	EPA 8270	03/27/00	KTL	
Hexachloroethane	<5	ug/L	EPA 8270	03/27/00	KTL	
Indeno(123cd)pyrene	<5	ug/L	EPA 8270	03/27/00	KTL	
Isophorone	<5	ug/L	EPA 8270	03/27/00	KTL	
N-Nitrosodi-n-propylamine	<5	ug/L	EPA 8270	03/27/00	KTL	
N-Nitrosodimethylamine	<5	ua/L	EPA 8270	03/27/00	KTL	
N-Nitrosodiphenylamine	<5	Ug/L	EPA 8270	03/27/00	KTL	
Naphthalene by Method 8270	<5	ug/L	EPA 8270	03/27/00	KTL	Α.
Mirobenzene	<5	ug/L	EPA 8270	03/27/00	KTL	
Pentachlorophenol	<5	ug/L	EPA 8270	03/27/00	KTL	
Phenanthrene	<5	Ug/L	EPA 8270	03/27/00	KTL	
Phenol -	<5	Ug/L	EPA 8270	03/27/00	KTL	
Pyrene	<5	l ug/L	EPA 8270	03/27/00	KTL	
Prior. Poll. pest/PCB by ECD	See below		EPA 8081	03/22/00	MSZ	
Prep, ECD	Completed		EPA 3510	03/17/00	MJY	
4,4'-DDD	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
4,4'-DDE	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
4,4'-DDT	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Aldrin	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Alpha-BHC	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Beta-BHC	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Chlordane	<0.05	vo/L	EPA 8081	03/22/00	MSZ	
Delta-BHC	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Dieldrin	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Endosulfan I	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Endosulfan II	<0.01	Ug/L	EPA 8081	03/22/00	MSZ	
Endosulfan sulfate	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Endrin	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Endrin aldehyde	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Gamma-BHC	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Heptachlor	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Heptachlor epoxide	<0.01	ug/L	EPA 8081	03/22/00	MSZ	
Toxaphene	<0.1	ug/L	EPA 8081	03/22/00	MSZ	
PCB Arador 1016	<0.1	ug/L	EPA 8082	03/22/00	MSZ	
PCB Aroclor 1221	<0.1	ug/L	EPA 8082	03/22/00	MSZ	

KAR Laboratories, Inc.

EPA 8082

EPA 8082

EPA 8082

EPA 8082 EPA 8082

03/22/00

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(616) 381-9666 **Laboratory Detail Report** Page 2 of 3

RECEIVEL 出第312% SMOD-DIMMED.

ABORATORY DETAIL REPORT

Client: Plainwell Paper Company

KAR Project No.: 001249

Date Reported :

03/28/00

Project

Desc.: Analysis of one sample for Wastewater Discharge Application.

Sample ID: "Outfall 005, Grab"

Sampled By: DH of Plainwell Paper

Sample Date: 03/15/2000

Sample Time:

Date Received :

03/16/2000

Sample Type:

aqueous

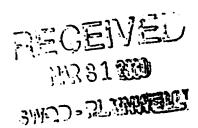
KAR Sample No.:

001249-02

Test	Result	Units of Measure	Method	Analyzed	Analyst	Comments
Prior. Poll. volatiles	See below		EPA 624	03/20/00	JAR	
Prep, VOA	Completed		EPA 624	03/20/00	JAR	
1,1,1-Trichloroethane	<1	ug/L	EPA 624	03/20/00	JAR	
1,1,2,2-Tetrachloroethane	<1	ug/L	EPA 624	03/20/00	JAR	
1,1,2-Trichloroethane	<1	ug/L	EPA 624	03/20/00	JAR	
1,1-Dichloroethane	<1	ug/L	EPA 624	03/20/00	JAR	
1,1-Dichloroethene	<1	ug/L	EPA 624	03/20/00	JAR	
1,2-Dichlorobenzene	<1	ug/L	EPA 624	03/20/00	JAR	
1,2-Dichloroethane	<1	ug/L	EPA 624	03/20/00	JAR	
1,2-Dichloropropane	<1	ug/L	EPA 624	03/20/00	JAR	
1,3-Dichlorobenzene	<1	ug/L	EPA 624	03/20/00	JAR	
1,4-Dichlorobenzene	<1	ug/L	EPA 624	03/20/00	JAR	
2-Chloroethylvinyl ether	<1	ug/L	EPA 624	03/20/00	JAR	
Acrolein	<5_	ug/L	EPA 624	03/20/00	JAR	
Acrylonitrile	<1	ug/L	EPA 624	03/20/00	JAR	
Benzene	<1	ug/L	EPA 624	03/20/00	JAR	
Bromodichloromethane	<1	ug/L	EPA 624	03/20/00	JAR	
Bromoform	11	ug/L	EPA 624	03/20/00	JAR	
Bromomethane	<1	ug/L	EPA 624	03/20/00	JAR	
Carbon tetrachloride	<1	ug/L	EPA 624	03/20/00	JAR	
Chlorobenzene	<1	ug/L	EPA 624	03/20/00	JAR	
Chloroethane	<1	ug/L	EPA 624	03/20/00	JAR	
Chloroform	<1	ug/L	EPA 624	03/20/00	JAR	
Chloromethane	<1	ug/L	EPA 624	03/20/00	JAR	
Cis-1,3-Dichloropropene	<1	ug/L	EPA 624	03/20/00	JAR	
Dibromochloromethane	2.3	ug/L	EPA 624	03/20/00	JAR	
Ethylbenzene	<1	ug/L	EPA 624	03/20/00	JAR	
Methylene chloride	<1	ug/L	EPA 624	03/20/00	JAR	
Tetrachloroethene	<1	ug/L	EPA 624	03/20/00	JAR	
Toluene	<1	ug/L	EPA 624	03/20/00	JAR	
Trans-1,2-Dichloroethene	<1	ug/L	EPA 624	03/20/00	JAR	
Trans-1,3-Dichloropropene	<1	ug/L	EPA 624	03/20/00	JAR	
Trichloroethene	<1	ug/L	EPA 624	03/20/00	JAR	
Trichlorofluoromethane	<1	ug/L	EPA 624	03/20/00	JAR	
Vinyl chloride	<1	ug/L	EPA 624	03/20/00	JAR	

KAR Laboratories, Inc.

(616) 381-9666 Laboratory Detail Report Page 3 of 3



63683

POTIVE RESULTS SUMMARY REPOT

Client: Plainwell Paper Company

KAR Project No.: 001249

Date Reported: 03/28/2000

Project

Description: Analysis of one sample for Wastewater Discharge Application.

Sample Description	n: "Outfall 005, 24 Hr. Compos	ilte"	
	Control of the Control of Control	Positive Result Concentration	g. more control of the Control of th
	Bis(2-ethythexyl)phthalate	38	ugit
Sample Description	n: <i>"Outfall 005</i> , Grab"	er Erverfaggar i digester ti gast esserius i novi espiriti i ni neversioni sa	The second secon
	Test	Positive Result Concentration	Units
	Bromoform	<u>:</u> 11	ugl
	Dibromochiorometrane	2.3	Pugit.



This Positive Results Summary Report provides an overview of the sample set and CONTAINS ONLY RESULTS ABOVE THE REPORTING LIMIT. It should not be used as a substitute for the attached detail report.

KAR Laboratories, Inc.

Positive Results Summary Report
Page 1 of 1

MSDS

PECEIVED

PRIST 200

PRIOR PLANTED

Callaway Chemical Company
A unit of Vulcan Chemicals
A subsidiary of Vulcan Materials Company

Pager i

DATE PREPARED: 09/04/1994

MSDS No: 10759-001 CALLAWAY 4015

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: CALLAWAY 4015

Product Description: Clear Light-Amber Liquid

Chemical Family: Cationic Polymer

Generic Name: Polyamine

MANUFACTURER:

Callaway Chemical

P.O. Box 2335 Columbus, GA 31993-3599

Customer Service: 1-706-576-6407

24 HR. EMERGENCY TELEPHONE

NUMBERS:

CHEMTREC

(800) 424-9300

Emergency Phone

1-706-576-2000

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS OF THIS MIXTURE MAY BE PROPRIETARY INFORMATION. IN THE EVENT OF A MEDICAL EMERGENCY, COMPOSITIONAL INFORMATION WILL BE PROVIDED TO A PHYSICIAN OR NURSE.

THIS PRODUCT IS HAZARDOUS AS DEFINED IN 29 CFR1910.1200, BASED ON THE FOLLOWING COMPOSITIONAL INFORMATION:

 wt.%
 CAS Registry #

 Polyamine Resin
 50
 42751-79-1

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYES

Irritating, but does not injure eye tissue.

SKIN:

Low order of rexicity.

Frequent or proionged contact may irritate and cause dermatitis.

May cause skin sensitization.

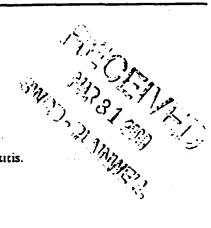
INGESTION:

Minimai toxicity.

INHALATION

Negligible hazard at ambient :-18 to 38 Deg C: 0 to 100 Deg F) or recommended blending temperature.

firitating to over and respiratory tract in high concentrations.



Callaway Chemical Company A unit of Vulcan Chemicals A subsidiary of Vulcan Materials Company

Page: 3
DATE PREPARED: 09/04/1994
MSDS No: 10759-001
CALLAWAY 4015

FIRE EXPLOSION:

Material will not burn.

"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT. FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

6. ACCIDENTAL RELEASE MEASURES

ENVIRONMENTAL PRECAUTIONS:

WATER SPILL:

Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

LAND SPILL:

Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures: for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 15) notify the National Response center.

Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with sand

Recover by pumping or with a suitable absorbent.

If liquid is too viscous for pumping, scrape up.

Consuit an expert on disposal of recovered material and ensure conformity to local disposal regulations.

COMMENTS:

Spilled material is slippery.

7. HANDLING AND STORAGE

GENERAL PROCEDURES:

Keep container closed. Both open and handle containers with care. Store in a cool, well ventilated place away from incompatible materials. Do NOT pressurize, cut, heat, or weld containers. Empty product containers may contain product residue. Do NOT reuse empty containers without commercial cleaning or reconditioning.

Storage Temperature: Keep from freezing Loading Temperature: Keep from freezing

Storage Pressure: Atmospheric

PECEIVED MR81200

SMCD-DIMMER

Callaway Chemical Company A unit of Vulcan Chemicals A subsidiary of Vulcan Materials Company

Page: 5
DATE PREPARED: 09/04/1994
MSDS No: 10759-001
CALLAWAY 4015

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:

A primary eye irritation study in rabbits was conducted (using EPA guidelines No. 81-4) using a test material similar to that represented by this MSDS. The maximum average irritation score of 12.3 (110 maximum possible), obtained at 1 hour after treatment, was used to rate the test material as minimally irritating. Since all "positive" effects were clear by 24 hours, the test material is assigned to Toxicity Category IV.

SKIN EFFECTS:

A primary dermal irritation study in rabbits was conducted (using EPA guidelines No. 61-5) using a test material similar to that represented by this MSDS. Test results indicate a primary irritation index of 0.0 out of a possible 8.0, or a descriptive rating of slightly irritating. Based on 72 hour scores only, the test material was assigned to Toxicity Category IV (mild or slight irritation).

PLEASE CALL THE NON-EMERGENCY TELEPHONE NUMBER ON PAGE ONE IF INFORMATION IS REQUIRED.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

Study results on a material similar to that represented by this MSDS are as follows: 48-Hour Static Acute Mysidopsis bahia Toxicity Test: LC50 = 15 mg/L 96-Hour Static Acute Pimephales promelas Toxicity Test: LC50 = 0.34 mg/L

13. DISPOSAL CONSIDERATIONS

PLEASE REFER TO SECTIONS 5, 6 AND 15 FOR DISPOSAL AND REGULATORY INFORMATION.

14. TRANSPORT INFORMATION

THIS PRODUCT IS NOT DOT REGULATED.



BURD - DI MANAGE

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

Fire: No Pressure Generating: No

Reactivity: No

Acute: Yes

Chronic: No

311/312 Hazard Categories: Acute Health.

313 Reportable Ingredients: This product does not contain Section 313 Reportable Ingredients.

Callaway Chemical Company A unit of Vulcan Chemicals A subsidiary of Vulcan Materials Company

Page: 7
DATE PREPARED: 09/04/1994
MSDS No: 10759-001
CALLAWAY 4015

HMIS RATINGS NOTES:

This information is for people trained in the National Paint & Coatings Association's (NPCA) Hazardous Materials Identification System (HMIS). Key
4 = Severe
3 = Serious
2 = Moderate
1 = Slight

0 = Minimal

MANUFACTURER DISCLAIMER:

NOTICE: Vulcan Chemicals believes that the information contained on this Material Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily all-inclusive nor fully adequate in every circumstance. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulation, rules or insurance requirements.

NO WARRANTY IS MADE, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.

PECEIVED
MR81200
3WCD-PANNEL

Ashland Distribution Co.

Page 001

Date Prepared: 01/26/98 Date Printed: 12/11/99

MSDS No: 306.0303884-003.005

DREWFLOC 3100 POLYMER

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: DREWFLOC 3100 POLYMER

Product Code:

General or Generic ID: POLYMER

Company

Ashland Distribution Co. £ Ashland Specialty Chemical Co. P. O. Box 2219

Columbus, OH 43216 614-790-3333

Emergency Telephone Number: 1-800-ASHLAND (1-800-274-5263)

24 hours everyday

Regulatory Information Number: 1-800-325-3751

COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number % (by weight) Ingredient(s) TRADE SECRET 1.0- 10.0 50-00-0 0.1 FORMALDEHYDE

HAZARDS IDENTIFICATION

Potential Health Effects

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

Symptoms of Exposure
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness).

Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: liver abnormalities, spleen damage, nervous system damage, eye damage, kidney damage, lung damage, brain damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: skin sensitization, eye damage.

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Continued on next page

THINK IC-COME

Ashland Distribution Co.

Page 003

Date Prepared: 01/26/98 Date Printed: 12/11/99

MSDS No: 306.0303884-003.005

DREWFLOC 3100 POLYMER

Autoignition Temperature
No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, formaldehyde.

Fire and Explosion Hazards

No special fire hazards are known to be associated with this product.

Extinguishing Media

regular foam, water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Health - 1, Flammability - 0, Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Spills of this material are very slippery. The area should be thoroughly flushed with water and scrubbed to remove residue. If slipperiness remains, apply more dry-sweeping compound.

7. HANDLING AND STORAGE

Handling

Not applicable

Storage

Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

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BINCO-PLANNEL

Ashland Distribution Co.

Page 005

Date Prepared: 01/26/98 Date Printed: 12/11/99

MSDS No: 306.0303884-003.005

DREWFLOC 3100 POLYMER

Appearance

TRANSLUCENT, CLOUDY LIQUID

State

LIQUID

Physical Form

HOMOGENEOUS SOLUTION

Color

TRANSLUCENT AND CLOUDY

Odor

AMINE

pН

10.5

Viscosity 33000.0

cps

Freezing Point 32.0 F (.0 C)

Solubility in Water

COMPLETE

STABILITY AND REACTIVITY 10.

Hazardous Polymerization
Product will not undergo hazardous polymerization.

Hazardous Decomposition

carbon dioxide and carbon monoxide, formaldehyde.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: acids, strong oxidizing agents.

TOXICOLOGICAL INFORMATION 11.

No data

ECOLOGICAL INFORMATION 12.

No data

PECEIVEL MNR 81 2991

SMOD-DIMMETT



Ashland Distribution Co.

Page 007

Date Prepared: 01/26/98 Date Printed: 12/11/99

DREWFLOC 3100 POLYMER

MSDS No: 306.0303884-003.005

EPA Accidental Release Prevention 40 CFR 68

RMP Component (s)

Condition

TQ (lbs)

FORMALDEHYDE (SOLUTION)

15000

International Regulations Inventory Status Not determined

State and Local Regulations
California Proposition 65
The following statement is made in order to comply with the California Safe
Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer. ACRYLAMIDE

FORMALDEHYDE (GAS)

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

CEMBER - COME

Last page

Ashland Chemical Co.

Page 001

Date Prepared: 02/28 66 Date Printed: 03/16/96

MSDS No: 0311120-001.001

DREWFLOC 2230 F POLYMER

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION 1.

Material Identity

Product Name: DREWFLOC 2230 F POLYMER General or Generic ID: POLYMER

Company

Ashland Chemical Co. P.O. Box 2219 Columbus, OH 43216

614-790-3333

Emergency Telephone Number: 1-800-ASHLAND (1-800-274-5263)

24 hours everyday

Regulatory Information Number: 1-800-325-3751

COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s) CAS Number % (by weight) ANIONIC POLYACRYLAMIDE 100.0

HAZARDS IDENTIFICATION 3.

Potential Health Effects

Eye

Exposure causes eye irritation. Symptoms may include stinging, tearing, redness, and swelling.

Exposure may cause mild skin irritation. Symptoms may include redness and burning.

Swallowing

Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts may be harmful. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.

Inhalation

Exposure to vapor or mist is possible. Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects; breathing large amounts may be harmful.

Symptoms of Exposure

gastrointestinal irritation (nausea, vomiting, diarrhea), irritation (nose, throat, respiratory tract), central nervous system depression (dizziness, drowsiness, weakness, fatugue, nausea, headache, unconsciousness).

Target Organ Effects No data

Developmental Information No data

Continued on next page

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3000-71 ANWELL.

Ashland Chemical Co.

Page 002

Date Prepared: 02/28/96 Date Printed: 03/16/96

MSDS No: 0311120-001.001

DREWFLOC 2230 F POLYMER

Cancer Information
No data

Other Health Effects No data

Primary Route(s) of Entry Inhalation, Skin contact.

4. FIRST AID MEASURES

Eyes

If material gets into the eyes, immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of vapor exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Seek immediate medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Do not induce vomiting. This material is an aspiration hazard. If individual is drowsy or unconscious, place on left side with the head down. Seek medical attention. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians
No data

5. FIRE FIGHTING MEASURES

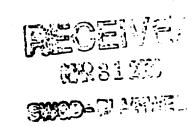
Flash Point 200.0 F (93.3 C) SETA

Explosive Limit
(for component) Lower .9 %

Autoignition Temperature

Hazardous Products of Combustion
May form: ammonia, carbon dioxide, carbon monoxide, nitrogen oxides.

Fire and Explosion Hazards
No special fire hazards are known to be associated with this product.



Ashland Chemical Co.

Page 003

Date Prepared: 02/29/96 Date Printed: 03/16/96

MSDS No: 0311120-001.001

DREWFLOO 2230 F POLYMER

Extinguishing Media alcohol foam, carbon dioxide, dry chemical.

Fire Fighting Instructions Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating Health - 1, Flammability - 1, Reactivity - 0

ACCIDENTAL RELEASE MEASURES

Small Spill Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occured. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Spills of this material are very slippery. The area should be thoroughly flushed with water and scrubbed to remove residue. If slipperiness remains apply more dry-sweeping compound.

7. HANDLING AND STORAGE

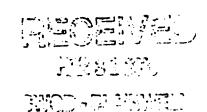
Handling Avoid contact with water. This material is slippery when wet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection Wear resistant gloves such as: nitrile rubber, To prevent repeated or prolonged skin contact, wear impervious clothing and boots..

Respiratory Protections If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.



Ashland Chemical Co.

Page 004

Date Prepared: 02/28/56

Date Printed: 03/16/96 MSDS No: 0311120-001.001

DREWFLOC 2230 F POLYMER

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

Exposure Guidelines Component

ANIONIC POLYACRYLAMIDE No exposure limits established

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (for component) 212.0 F (100.0 C) @ 760 mmHg

Vapor Pressure No data

Specific Vapor Density 1.000 @ AIR=1

Specific Gravity 1.000 - 1.070 @ 77.00 F

a.300 - 8.900 lbs/gal @ 77.00 F 1.000 - 1.070 kg/l @ 25.00 C

Percent Volatiles 50.0 - 70.0 %

Evaporation Rate No data

Appearance EMULSION

State LIQUID

Physical Form HETEROGENEOUS SOLUTION

Color WHITE

Odor SLIGHT ORGANIC

pН 8.0 - 9.0

SMCD-CLASSIFICA

Ashland Chemical Co.

Page 005

Date Prepared: 02/28/@

Date Printed: 03/16/36 MSDS No: 0311120-001.001

DREWFLOC 2230 F POLYMER

Viscosity 1200.0 cps

Freezing Point 7.0 F (-13.8 C)

Solubility in Water 10% - FORMS GEL

10. STABILITY AND REACTIVITY

Hazardous Polymerization
Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: ammonia, carbon dioxide, carbon monoxide, nitrogen oxides.

Chemical Stability Stable.

Incompatibility
Avoid contact with: aluminum, copper, iron, strong oxidizing agents, Contact
may result in corrosion & product degradation..

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information
Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101 DOT Description:
NON-REGULATED BY D.O.T.

Container/Mode:
55 GAL DRUM/TRUCK PACKAGE

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Ashland Chemical Co.

Page 006

Date Prepared: 02/28/96 Date Printed: 03/16/96

MSDS No: 0311120-001.001

DREWFLOC 2230 F POLYMER

NOS Component: None

RQ (Reportable Quantity) - 49 CFR 172.101 Not applicable

15. REGULATORY INFORMATION

US Federal Regulations
TSCA (Toxic Substances Control Act) Status TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4 None

SARA 302 Components - 40 CFR 355 Appendix A

Section 311/312 Hazard Class - 40 CFR 370.2 Delayed() Fire() Reactive() Immediate(X) Sudden Release of Pressure()

SARA 313 Components - 40 CFR 372.65 None

International Regulations Inventory Status Not determined

State and Local Regulations California Proposition 65 None

OTHER INFORMATION 16.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Last page

PAGE 000



PRODUCT SAFETY DATA SHEET



TRADE NAME (COMMON NAME)		1 -	GENERAL PRODUCT CODE		
A GUID ALUMAT	10043-01-3 (anhydrous)				
Aluminum Sulfate, aqueous solution					
FORMULA		MOLEC	ULAR WEIGHT		
48.5% Al ₂ (SO ₄) ₃ ·14H ₂ O in water			(approx.) for (SO ₄) ₃ ·14H ₂ O		
DDRESS (No., STREET, CITY, STATE AND ZIP CODE)			· · · · · · · · · · · · · · · · · · ·		
GENERAL CHEMICAL CORPORATION 90 East Halsey Road Parsippany, N.J. 07054					
CONTACT	PHONE NUMBER	LAST ISSUE DATE	CURRENT ISSUE DATE		
Manager of Product Safety	(973) 515-1840	November, 1996	WALL IN EDSOR		

B. FIRST AID MEASURES

EMERGENCY PHONE NUMBER (800) 631-8050

EYES: Flush immediately with water, continuing for at least 15 minutes. If irritation persists, get medical attention.

SKIN: Flush with plenty of water, removing contaminated clothing. If irritation develops, get medical attention.

INHALATION: Promptly remove to fresh air.

ND + NOT DE THRMINED

INGESTION: If conscious, immediately give a large quantity of water or milk. If not already vomiting, induce vomiting

by touching finger to back of throat. Get immediate medical assistance.

C. HAZARDS INFORMATION:

CC124-239 (11-84)

HEALTH NHALATION Inhalation of alum mist may irritate respiratory tract. INGESTION May irritate gastrointestinal tract. Concentrated solutions may cause burns to the digestive tract. LD₅₀ (mouse): 980 mg(Al)/kg -- Reference (a). Recorded Human fatal dose of 30 grams. Ref. (c). SKIN May cause skin irritation. EYES May strongly irritate or burn eyes. PERMISSIBLE CONCENTRATION: AIR BIOLOGICAL (SEE SECTION J) OSHA / TWA = 2 mg/cu.m. (as Al) ACGIH / TLV = 2 mg/cu.m. (as Al) None. UNUSUAL CHRONIC TOXICITY None known.

NA . NOT APPLICABLE

C"HAZARDS (Co	nt.) =
FIRE AND EXPLOSION	!

FIRE AND EXPLOSION					
FLASH POINT O C	AUTO IGNITION TEMPERATURE	۰c	FLAMMABLE I M	ITS IN AIR (% 8"	YVOL)
Not flammable Cucsed cur	NA		LOWER -	NA	UPPER - NA
UNUSUAL FIRE AND EXPLOSION HAZARD	s		<u></u>		
See Hazardous Decompositi	on Products, Section G.				
D. PRECAUTIONS/PROCE	DURES				
FIRE EXTINGUISHING AGENTS RECOMM	ENDED				
Product is nonflammable. Us	e any extinguishing agent	suitable fo	r surrounding	fire.	
FIRE EXTINGUISHING AGENTS TO AVOID					
None known.					
SPECIAL FIRE FIGHTING PRECAUTIONS					<u></u>
Wear self-contained breathing Use water spray to keep cont		NIOSH.			
VENTILATION					
Local exhaust if misty condi	tion prevails. May exceed	TLV witho	ut visible indi	cation.	
NORMAL HANDLING				·	
Avoid contact with skin, eyes,	or dothing. Avoid breathi	ng mist.			
STORAGE					
Store is a cool area.					
SPILL OR LEAK (ALWAYS WEAR PERSONA	DONTECTIVE ECHIPMENT . CECT	ON EV		 	
Dilute small spills or leaks cau- limestone. Adequate ventilation gas. (See Section I for dispose	n is required if soda ash o	or limeston	e is used, be	cause of the	th alkali such as soda ash, lime or a consequent release of carbon dioxide alize and so forth as above.
SPECIAL: PRECAUTIONS/PROCEDURES/LA	BEL INSTRUCTIONS	S	IGNAL WOR	D - WARNI	ING!
E. PERSONAL PROTECTIV	/E EQUIPMENT				
RESPIRATORY PROTECTION					Land Color
Where required, use a respiral	or approved by NIOSH fo	or mists.			
YES AND FACE					1071 A 7 300
Wear hard hat (or other head of Do not wear contact lenses.	xvering) and chemical sa	afety goggi	es.		
ANDS, ARMS, AND BODY			<u></u>		576 1107
Wear impervious gloves and a clothes should be substituted	ipron and full work clothin if there is prolonged or re	ng, includin peated cor	ig shirt, trouse ntact.	ers, and boo	ots. Completely impervious
THER CLOTHING AND EQ. PHENT					
Eve-wash and quick-drench st	nower facilities				

F. PHYSICAL D	النالن		_		
MATERIAL IS INT NORMAL	. CONDITIONS):		APPEARANCE AND ODOR		
_	SOLID	☐ GAS	Odorless, clear, light green or an	mber liqu	VAPOR DENSITY (AIR = 1) NA
0					VAPOR DENSITY
BOILING POINT		101 ° C	SPECIFIC GRAVITY (H.Q.= 1)		(AIR - 1)
MELTING POINT	•	-16 ° C	1.335		NA O
SOLUBILITY IN WATER (% by Weight)			рН		VAPOR PRESSURE (mm Hg at 20°C) (PSIG)
(Complete		1% solution; pH = 3.5 (approx.))	NA
EVAPORATION RATE (Butyl Acetale = 1)	(Ether = 1) {	<u> </u>	% VOLATLES BY VOLUME (AL20°C)		
	NA	_	Approximately 50%		
G.REACTIVITY	DATA				
STABILITY			CONDITIONS TO AVOID		
□ UNSTABLE	⊠ STAB	3LE	If evaporated to dryness, residue s above 760° C (1400°F): these yie	should no eld toxic	at be exposed to temperatures and corrosive gases.
INCOMPATIBILITY (MATERI	IALS TO AVOID)				
	•	∍rials such as o	oleum: cause exothermic reactions.		
HAZARDOUS DECOMPOSIT	TION PRODUCTS				
At temperatures ci fire hazard. The lo	ted above, subsided above, sub	flur oxide gases ises.leaves a c:	s. These are toxic and are oxidizers and austic residue.	corrosive	e. The trioxide is also a
HAZARDOUS POLYMERIZA	TION		CONDITIONS TO AVOID		
MAY OCCUR	区 WILL N	IOT OCCUR	NA		
			<u> </u>		
H. HAZARDOUS	INGREDIEN	TS (Mixtures	Only)		
	MATER	RIAL OR COMPONE	ENT / C.A.S. #	WT.%	HAZARO DATA (SEE SECT. J)
	Aluminum Su	ffate - 14 H ₂ C	O / 10043-01-3 (anh.)	48.5	OSHA / TWA = 2 mg/cu.m. (as Al)
			!	. '	
			, , , , , , , , , , , , , , , , , , ,	1	
		•	'	1	

I. ENVIRUNMENTAL		
DEGRADABILITY/AQUATIC TOXICITY	OCTANOLWATER PARTITION COEFFICIENT ND	
Aquatic toxicity:		
14 ppm/36 hr/fundulus/fatal/fresh water		
240 ppm/48 hr/mosquito fish/TLm/*		
*water type not specified Reference (b)		
EPA HAZARDOUS SUBSTANCES F SO REPORTABLE QUANTITY: Approxitic CLEAN WATER ACT SEC. 311) YES NO	mately 18,000# (as is)	40 CFR 116-117
Users should review their operations in terms of any applicable feder with appropriate regulatory agencies before discharging or disposing be disposed of by burial in an approved chemical wastes landfill or re	al, state and local laws and regulations, then co	nay
RCRA STATUS OF UNUSED MATERIAL IF DISCARDED EPA Hazardous Waste, if discarded, and pH is less than 2.	HAZARDOUS WASTE NUMBER: (IF APPLICABLE)	40 CFR

J. REFERENCES

PERMISSIBLE CONCENTRATION REFERENCES

OSHA Z-List; 29 CFR 1910.1000

ACGIH 1997 List, "Threshold Limit Values for Chemical Substances...".

REGULATORY STANDARDS

D.D.T. CLASSIFICATION:

Class 8

49 CFR 173

Per 49 CFR 172.101

D.O.T. ID NO. UN3264

GENERAL

- (a) Stokinger, H.E., "The Metals", Chapter 29 in Patty, Industrial Hygiene and Toxicology 3rd Ed., 1981, Vol. IIA, John Wiley, N:Y.C., particularly Section 1.5.1 for aluminum.
- (b) Coast Guard CHRIS system form, "ALM", "Aluminum Sullate" (-18 H₂O), Oct.,1978.
- (c) Gosselin, R.E., et. al., Clinical Toxicology of Commercial Products (Baltimore, Williams & Williams, 1976) page 89, Section 2.

K. ADDITIONAL INFORMATION

NOT FOR FOOD OR DRUG USE, UNLESS MARKED AS SUCH.



PSCS FILE No. GC-2002

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